DEPARTMENT OF ECONOMIC AFFAIRS: MINISTRY OF FINANCE

DEVELOPING A FRAMEWORK FOR RENEGOTIATION OF PPP CONTRACTS

FINAL REPORT

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Disclaimers

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Cover photo: Jaipur- Kishangarh Section of NH-8, National Highways Authority of India

Executive Summary

Department of Economic Affairs is developing a framework for renegotiation of Public Private Partnership (PPP) Contracts (Concession Agreements), with a particular focus on the National Highway and Major Port Concessions. This report presents fact-based approach towards renegotiating the terms of Concession Agreements, by establishing reasonable objectives. Prime tenets that have been considered are ascertainable cost, risk and social benefit neutrality (or benefit).

India has emerged as one of the leading Public Private Partnership (PPP) markets in the world, due to several policy and institutional initiatives taken by the central government and a sustained effort in various sectors to accelerate the implementation of PPP projects and programmes.

India has also developed a strong framework for the approval of PPP projects at a central government level with appropriate oversight exercised by bodies independent of the particular projects and aware of the fiscal implications of PPPs.

Various challenges have arisen along with the acceleration in pace of the roll out of PPPs. A blockage in the bidding process of some PPP programmes has developed with private sector developers and financiers stating that they will not participate in any project bidding given the perception that participation has become too risky and because their exposure to projects in implementation that may be in some distress is too high.

Different sectors developed in different ways and developed issues specific to that sector. For example, the Major Ports PPP Programme has issues with projects that were concluded early in the programme while those in the latest round of concessions are functioning better, while the National Highways have some very successful projects that go back to the inception of the national PPP Program and yet many current projects are in some form of distress.

The common themes that emerge across sectors are that risk allocation is viewed as one-sided; several sovereign obligations are not being met, especially with regard to land and right-of-way provisions in many highway PPPs. In many cases project preparation is seen as inadequate in terms of critical elements of determining the public sector obligations for land and services and commercial assessment of the business case underlying the PPP is often neglected because the process is often rushed.

On the private sector side it is apparent that there has been opportunistic and unrealistic bidding in terms of revenue sharing that has placed concessions at risk of failure as economic conditions worsened over the last five years.

As far as the contractual elements of the PPPs is concerned, there is a general consensus that the Model Concession Agreements (MCAs) are inflexible and that, outside a narrow set of Change in Law and Force Majeure events, there is no ability to change the terms of the concession.

The stakes are very high. The National Highway PPP programme has grown into a Rs2,27lakh crore investment of which more than 90% is financed via probate entities or public banks. It is possible to estimate conservatively that Rs1,55lakh crore is funded by debt (banks). The maximum contingent liability at 90% of debt due for the whole programme could be as high as Rs1,40 lakh crore (about USD23 billion). For the Major Ports there is no overall estimate of contingent liability but the termination compensation for concessionaire default on five sample projects is calculated as Rs44,890 crore.

The report, based on stakeholder inputs and a comparison of concession agreements with international good practice, identifies 34 issues in six categories and compares the manner of dealing with them across international comparator countries of Australia, South Africa, the United Kingdom and Chile.

The four international comparator countries match well with India. Each country examined has struggled with exactly the same issues that India. Each has made significant changes to its PPP policy, frameworks and contractual arrangements as part of the evolution of the PPP programme.

Each of these four countries permits amendments to their PPP Agreements and to varying degrees has a regulatory framework that specifies how this should be done.

All the countries have cases of changes and renegotiation and the case studies highlight the circumstances of each. Australia has a mix of cases ranging from a completely non-interventionist government to active renegotiation. The "let the market work" approach in the Sydney Harbor Tunnel and the Lane Cove Tunnel saw lenders step in and sell the concession in a competitive bidding. In the Reliance Rail and Southern Cross Terminal Station projects, the government was much more active in negotiating amended agreements to stave off termination and provide a public service or save dispute costs.

Each country has institutional arrangements that separate the approval of amendments from the body that manages the process of achieving the amendments.

The report carries out a detailed analysis of the issues, and particularly the major issues related to amendment of the concession agreements. It concludes that, in order to deal with the issues identified, changes need to be made in the contractual and institutional environment such that the government has the option to amend concession agreements in a structured manner where decisions are based on a understanding and or quantification of causation and fault; materiality; changes in risks, financial costs; adverse consequences and public economic benefits.

The report suggests that existing governance and oversight arrangements used for the approval of concessions prior to signature will suffice to provide an objective institutional arrangement for amendments of concessions. The report also identifies a useful mechanism used in Chile whereby disputes can be avoided through the use of independent technical expert panels. Finally the report suggests that changing the bid evaluation criteria to require financially underwritten bids and to permit the exclusion of speculative bids will assist in minimizing the need to amend concession agreements.

The Report set in the context of DEA's ongoing review, analysis and policy initiatives of the PPP sector, including the areas of project selection and contract management, recommends that:

1. The Model Concession Agreements in National Highways and Major Ports be revisited and amended to explicitly permit amendments of concession agreements;

2. Such amendments, to the extent that they are material in the context of the original concession agreement, be approved by the same approving authority that approved the entering into of the original concession agreement;
3. Such approval be based on an objective assessment of causation and fault; materiality; risk; financial cost; adverse consequences and public benefit;
4. In the absence of other value-for-money criteria, 90% of debt due should be used as the absolute limit of any payment by the State in any amendment or termination and retendering that requires payment. This is in return for full access to revenue less operating costs and in any lesser payment the proportion is maintained;
5. In a consultative way with a panel of legal experts and PPP practitioners the MCAs be examined and amended to bring them into closer alignment with international practice on other matters identified in this report, including variations, land provisions, compensation events, refinancing, changes in traffic and revenue and economic and financial changes;
6. The process of reaching settlements before formal dispute resolution processes be re-examined and the possibility of using sector specific independent technical panels to assess disputes with a view to settlement assessed; and
7. The bid evaluation process be amended to require more firmly underwritten bids showing higher levels of involvement of lenders and to eliminate bids that are demonstrably out of line with realistic commercial (cost and revenue) projections.

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1. Purpose

Department of Economic Affairs is developing a framework for renegotiation of Public Private Partnership (PPP) Contracts (Concession Agreements), with a particular focus on the National Highway and Major Port Concessions. This report presents fact-based approach to amending the terms of Concession Agreements, by establishing reasonable objectives. Prime tenets that have been considered are ascertainable cost, risk and social benefit neutrality (or benefit).

2. Introduction

In its Annual Report for 2012/13, the Ministry of Finance reported that the "*Government of India is promoting Public Private Partnerships (PPPs) as an effective tool for bringing private sector efficiencies in creation of economic and social infrastructure assets and for delivery of quality public services.*" It went on to note that India has emerged as one of the "*leading PPP markets in the world, due to several policy and institutional initiatives taken by the Central government.*" It notes that over 900 PPP projects with a Total Project Cost (TPC) of Rs543,045 crore were approved in the period 2010 to 2013 and are at different stages of implementation, i.e. under bidding, construction and operational stages. Prior to this, some 600 projects with a TPC of Rs333,083 crore had been approved, demonstrating a marked acceleration in the rate of projects being approved for procurement. This makes the Indian PPP programme one of, if not the, largest in the world in terms of the number of projects approved for implementation as PPPs.

India has also developed a strong framework for the approval of projects at a central government level with appropriate oversight exercised by objective bodies aware of the fiscal implications of PPPs. This oversight is exercised by the Public Private Partnership Appraisal Committee (PPPAC), which was established in January 2006. PPPAC has approved 276 central project proposals with a TPC of Rs277,338.30 crore.

The table below shows these approvals by sector, number and TPC.

Table 1: Central PPP Projects Approved by PPPAC since 2006[1]

Sector	No. of Projects	Total Project Cost (Rs Crore)	Sectoral Share (% in terms of numbers)
Highways	224	235,437.56	81.16
Railways	01	8,500.00	0.36
Ports	26	22,477.70	9.42
Civil Aviation	02	1,000.00	0.72
Tourism	01	148.87	0.36
Housing	17	7,299.00	6.16
Sports Stadia	05	2,475.00	1.81

However, as shown in this report, various challenges have arisen along with the acceleration in pace of the roll out of PPPs. In the Highways sector, the number of projects actually reaching operations decreased to a handful in the past year. A blockage in the bidding process has developed with private sector developers and financiers stating that they will not participate in any project bidding given the perception that this has become too risky. As a result, there is a real risk that the reputation of PPPs as a means of developing and financing economic infrastructure in India could be tarnished, both from a private sector and a high-level government perspective where frustration at a perceived slow pace of roll out could influence policy development to move back to more traditional publicly-funded infrastructure projects. This would indeed be a disappointment and a reversal of gains made in the context of the existing PPP framework.

This report seeks to establish why this has happened, what the issues are and how they might best be addressed.

The methodology applied is simple. Three primary sources of information are used: interviews conducted with public and private sector stakeholders, data from the National Highways Agency of India and the Ministry of Shipping on highway and port PPPs, and international comparators from countries with substantial PPP programmes.

The issues affecting PPPs both in India and in the international comparator countries are identified. These are then mapped against how they have been dealt with in comparator countries with case examples. These same issues are then mapped against the commonly-applied position in the Indian context, represented by the Model Concession Agreement (MCA) and sample concession agreements for National Highways and Major Ports.

Differences between the international comparators and the Indian position are then examined in the particular context of India and then options for changing the Indian position are set out with some discussion as to the benefits and disadvantages of the options.

3. Limitations

In terms of the limitations on scope of the report, the sectors are limited to the National Highways and Major Ports. A further limitation is that the report does not focus on resolutions specific to particular projects that are currently in distress but rather on a way forward in refining and improving the PPP programme in terms of adjustments to the risk profile adopted for the two sectors.

In addition, the limited available data on projects and their performance means that the report is not empirical in nature. As such more reliance is placed on the feedback from stakeholders than on empirical data for the conclusions reached.

It is noted that PPPs are complex contracts and their planning and implementation are among the most complex forms of public planning and procurement. There is thus no single solution to increasing the deal flow or reducing the distress currently experienced in the sectors and in the projects. A chain of activities make up a PPP implementation process, starting with project selection and ending with the expiry of the PPP Agreement some 25 to 30 years later. The influence on value, risk and cost is greatest at the early stages of this process in the selection of the projects and the work that government does in preparing them. Then, in implementation of the PPP Agreement, the risk positions set out in contracts are only as good as the management thereof by the two parties but in particular the contracting authority.

Thus this report and its conclusions cannot be a panacea for the PPP Program; it is rather a set of options that can be applied to deal with amendments of concession agreements and must be implemented along with a range of other improvements currently being implemented in India.

4. Context of Renegotiation

PPP Agreements or Concession Agreements differ from agreements for the provision of commercial goods or services between two private sector entities in several ways. These include:

- PPPs relate to public services/goods awarded through a competitive bidding process;
- PPPs are typically very high value contracts, often with capital costs of hundreds of millions of dollars and ongoing operating costs and revenues of tens of millions of dollars per year, which makes it difficult for a party to such agreement to tolerate any losses to capital invested or revenue forgone;
- PPPs are usually long-term arrangements spanning 10-30 years and, hence, are not amenable for writing "perfect" contracts covering all the situations and developments during the course of their lifetime; and
- PPPs are often intended to provide essential facilities that may often not have substitutes and can be neither paused nor disrupted while the contracting parties resolve the differences that may arise during the course of implementation.

Given the characteristics set out above and the fact that PPPs have been used in great numbers in many jurisdictions around the world, it is no surprise that a number of such projects have become distressed in terms of the emergence of risks that may not have been contemplated at the time of signing. As Guasch[2] identifies, many such projects have been renegotiated over time. The forms of distress may vary but factors that lead to such distress could include any or a combination of the following:

- Lower than expected revenue;
- Higher than expected costs;
- Delays;
- Variations in contractual specifications and;
- Disagreements between the parties as to cause and effect of actions/inactions.

Any of these could give rise to a call for amending the terms of the Concession Agreement to better reflect the project realities.

However, it is observable that such calls typically (but not always) originate from the private party to the Concession Agreement and, since the objectives behind such a call will be biased towards maintaining a required return on investment, or preventing a default under financing agreements undertaken by the private party or avoiding a risk or set of risks, the amending of the Concession Agreement may not be in the best interests of the public concessioning authority (acting on behalf of the Government).

It is therefore sensible to develop and implement a framework for dealing with such proposed amendments and, as shown in the International Comparator section to this report, all jurisdictions examined have indeed provided for such a framework, albeit in different ways.

5. Feedback from Stakeholders

This section of the report is based on a number of meetings held with public and private stakeholders who have a variety of interests in the PPP Program in India. The meetings were informal and participants were encouraged to provide feedback to three basic questions:

- What is your involvement in the Indian PPP Program?
- What is your view of the problems in the programme?
- What are possible solutions?

In the discussions certain themes emerged:

a) There is a bottleneck in current bidding for PPP projects.

b) This is related to the experience of bidders who have been involved in or are involved in PPP projects at implementation or operation stage.

c) These experiences relate to various factors:
   - The PPP Program started well and created an enthusiasm in both public and private sectors;
   - The economic climate and in particular GDP growth and liquidity of debt and capital markets created an exuberant market for investors in what appeared to be an attractive asset class;
   - This exuberance occurred in projects put to bidding in a largely unregulated manner (although largely based on international good practice and sound preparation). The focus was on realizing investment in a large scale on developing infrastructure (e.g. the National Highway Development Plan); and
   - Different sectors developed in different ways and developed specific issues. For example, the Major Ports PPP Program has issues with projects in operation that rely on a series of court orders staying the tariff regime changes on the earliest concessions, while the National Highways have some very successful projects that go back to the inception of the national PPP Program.

d) The common themes that emerge across sectors are:
   - Risk allocation is viewed as one-sided;
   - Sovereign obligations are not being met, especially with regard to land and right-of-way provisions in many highway PPPs;
   - Project preparation is seen as inadequate in terms of land availability and traffic demand forecasting because the process is often rushed. This is exacerbated by a reliance in the

Model Concession Agreement for Highways on base-case financial data for use in determining, inter-alia, compensation payable on termination;

- From private-sector stakeholders, there is a nostalgia for annuity-type PPPs, which have seen decreasing use, ostensibly because of a premise that demand risk should be transferred to the private sector;
- There has been opportunistic and unrealistic bidding in terms of revenue sharing that has placed concessions at risk of failure as economic conditions worsened over the last five years. This has not been tested against long-term viability by government agencies bound by cost-driven procurement rules;
- There is a general consensus that the Concession Agreements are inflexible and that, outside a narrow set of Change in Law and Force Majeure events, there is no ability to change the terms of the concession;
- There needs to be an ability for an independent view on the changes to the terms of the Concession Agreement where necessary to grant relief for events outside the control of the concessionaire (no one interviewed advocated a blanket rescue for distressed projects); and
- All interviewed requested some form of feedback and expressed great interest in the assignment.

A more detailed summary of each discussion is attached as Annexure A.

6. The Use of Model Concession Agreements

The use of standardized PPP contractual provisions is common around the world. The advantages are many and significant. Transaction costs are reduced, market bidding is simplified as bidders develop confidence in the contracts and financiers find the risk positions to be "bankable".

There is however a down side to their use and that is that they are used as templates without sufficient consideration given to the characteristics of each project. Less preparation work is done and critical factors can be missed without the necessary commercial acumen in the government advisory teams.

It also happens that, in developing the model agreements, the governments take a fairly "ivory tower" approach to risk allocation and assign risks that the market, or large parts of it, are not willing to take. This may defeat the purpose of creating the model agreements.

It is interesting to note that Infrastructure Australia has moved from prescribing standardized provisions to providing a set of commercial principles that are applied to each project using suitably qualified and experienced commercial advisors and internal staff in public agencies. This is backed up by advisory teams from the state treasuries.

At the other end of the scale, South Africa has moved in the other direction with non-negotiable standard Power Purchase Agreements, Implementation Agreements and Direct Agreements for the Independent Power Producer (IPP) programme. However, these were developed after an extensive review of global best practices and consultations with numerous public and private sector actors by some of the best international advisors available. Despite some bidder reservations regarding the lack of flexibility to negotiate the terms of the various agreements, the overall thoroughness and quality of the standard documents seemed to satisfy most of the bidders participating in the three rounds of bidding that yielded increasing low tariffs as competition increased.[3]

7. Sector Information

7.1. Highways

The National Highways Authority of India (NHAI) has provided data for the highways PPP programme as well as data on a sample of 15 projects with detail around the shareholding and financing arrangements for each project. This is attached as Annexure C. Although precise information on the number of projects in distress is not provided or indeed the causes of distress it is possible to extract the following in an analysis of the data:

- There are 15 projects in the sample.
- Six are in the operations phase (of which 3 have partial CoDs).
- Seven are in the construction phase.
- Two are in some form of pre-CoD distress with construction either stopped or not commenced (Aligarh to Kanpur section of NH-91 and Gwalior-Jhansi section of NH-75).
- Four in the construction phase have received or are approved to receive Viability Gap Fund (VGF) grants totaling some Rs1,625 crore.
- Three are annuity-type contracts (Rs2,147 crore TPC, excluding an NHAI amount of Rs625 crore on the Hazaribag-Ranchi Concession), the rest are concessions of the DBFOT type.
- The average contract duration is 24 years; the earliest COD is given as January 2008.

The Total Project Cost of all 15 projects is Rs17,200 crore; the TPC of the projects in distress is Rs1,579 crore. The remainder is split between the Operational Concessions (Rs6,316 crore) and those in construction (Rs9,143 crore).

The average D/E ratio is 74/26 while the average for the three annuity-type projects is 84/16 (all excluding VGF). This higher leverage is to be expected as annuity-type projects are much lower risk, especially in the operations phase.

The government's maximum contingent liability for these 15 sample projects, based on 90% of debt due at financial close and assuming no insurance proceeds, is measured at Rs11,112 crore or some 65% of TPC, assuming that the TPC has not increased and been funded from sponsor equity after financial close.

On the face of it, this means that on a mass default of the concessions, government would pay about two thirds of the cost of the highways and have the toll revenues in perpetuity as well as own all the assets so created.

However, this is not as attractive an option as it may appear for the following reasons:

- More than half the projects are pre-COD and thus not completed;
- There are very few clear-cut terminations. Given the obligations of the public authorities, the right of a public authority to terminate the concession agreement will be fiercely contested in disputes;
- Termination for public authority default is extremely punitive and would result in government over-paying for the assets;
- Such an act would (even if warranted and possible) breach the two reasons behind the PPP highways programme in that the operational efficiency of the private sector would be lost and government would have paid out of the public purse for assets that would otherwise have been off budget; and
- The oldest concession is only six years post-COD and traffic ramp-up, especially in the constrained economic climate worldwide, is slow and uncertain. Government would be assuming traffic demand risk with little ability to manage it.

Although there is no data available on traffic demand and revenue for the concessions, anecdotal evidence is that this has been behind forecast and thus a cause of distress in the vast majority of projects.

It is also reported that many projects have experienced cost overruns relative to forecast and these have been financed by lenders and sponsors.

A sense of the scale of the issue can be gained from comparing the data provided for the overall programme for National Highways.

Table 2: Indian National Highways PPP Data

	Currently in Operation	Procurement/Construction
Physical metrics		
Road-km under a PPP	4,260	16,637
Of which BOT toll	3,157	14,359
Of which annuity	1,103	2,278
Contract metrics		
Total # of contracts under PPP	76	158
Of which BOT toll	58	128
Of which annuity	20	30
Financial metrics – INR crore		
Total investment under PPP	39,133	187,582
Via private entities or public banks	36,423	172,814
Via public grants	2,710	14,768

The National Highway PPP programme is growing into a Rs2,27lakh crore investment of which more than 90% is financed via probate entities or public banks. Taking the sample data D/E ratio of 76/24 it is possible to estimate conservatively that Rs1,55lakh crore is funded by debt (banks). The maximum contingent liability at 90% of debt due for the whole programme could be as high as Rs1,40 lakh crore (about USD23 billion).

Based on stakeholder feedback, specific issues raised with regard to the national highways PPPs can be identified and broken down into project cycle phases.

7.1.1. Project Preparation

- Project selection and preparation is rushed so that limited information is available resulting in poor cost estimating and inappropriate project structuring;
- Inadequate information on critical land, design or demand is made available to bidders; and
- The site is not always available and at financial close needs only be 80% acquired.

7.1.2. Project Bidding

- Bidder response has also been inappropriate with bidding either aggressive on demand or naïve on risks that have not been properly examined;
- Lenders have been naïve in instances where they have not understood the risk allocation or have been accepting of demand forecast of bidders; and
- The limited underwriting of the financing means there is a weak link between preferred bidder award and financial close. Many projects are stuck in this stage (and, anecdotally, developers seek reasons not to reach financial close if they feel that they cannot raise finance on suitable terms and wish to avoid the termination penalty for failing to reach financial close).

7.1.3. Financing Structure

- The financing structure has been such that, despite a reasonable debt equity ratio, lenders have been put in a position where they stand the most to lose because a) the developers have limited true equity, and b) the lender's recourse is 90% of debt amount; and
- Returns on equity are much higher for demand-risk projects than annuity-type contracts or EPC-type contracts.

7.1.4. Risk Profile

- Many highway concessions have transferred demand risk to the private sector in situations where the downside is considered unmanageable;
- The Model Concession Agreement has a very aggressive risk profile in terms of transfer of risks, especially demand risk. This perception of risk transfer is problematic because the

risks simply become disputes when they materialize. When combined with the aggressive bidding referred to above, they also seem to have rolled up into system-wide problems, where the government may be forced to resolve or unwind contracts with some form of bail-out rather than see a number of projects fail with significant losses to lenders;

- The MCA also has very limited forms of relief in cases of events outside the control of the concessionaire. Again, this creates the perception of risk transfer but the likely (and by all appearances the actual) outcome is disputes and forms of settlement agreements that take place in an unstructured way; and
- Finally, the MCA does not permit any form of amendment of the Concession Agreement. This is linked to the absence of any framework within which such amendments can be identified, negotiated and approved by empowered bodies on a rational basis.

7.1.5. Implementation Stages

- Projects that reach the implementation stages frequently have cost overruns. These are reported as being as a result of design changes or third-party regulatory approvals in addition to material costs or other components normally taken as risk by the private party. There is no formal mechanism to vary specifications to accommodate design changes required by the government and separate these from risks that the concessionaire should take in the ordinary course of business; and
- Land acquisition is not complete at financial close given the 80% rule in the various agreements. (The MCA does not have this but allows 150 days to provide an unencumbered site after which penalties at a low Rs1,000 per 1,000m^2 per month are payable). This is said to be a flashpoint for disputes.

7.1.6. Contract Management

- The government agencies appear to be too far removed from the contract management to be informed of arising risks and programme-wide indication of issues before they become systemic.

7.2. Ports

The Ministry of Shipping (MoS) has provided a set of data for all PPPs in the Major Ports with detailed timing and investment values for each project. In addition, five sample projects have data related to performance and tariffs. This is attached as Annexure D.

Since 1995, a total of 74 Major Port concessions have been implemented with a total maximum freight capacity of some 570MMTPA. The Total Project Cost (TPC) at time of signature was Rs49,879 crore.

Of these 74 projects, nine were implanted before any form of Model Concession Agreement was used (i.e. pre-2001); 16 were done between 2001 and 2006 under the standard agreement developed by the IDFC and 49 under the MoS Model Concession Agreement.

The Tariff Authority for Major Ports (TAMP) was formed in 1997. In 1998, TAMP adopted guidelines to determine tariffs for all the major ports. These guidelines stated that it would be advisable to revise tariffs every two years to provide stability to ports and to trade. The guidelines further stated that tariff revision proposals could be presented to TAMP by ports, private operators or the users of the ports. This process has been followed and the tariff regime has undergone changes over time:

- Guidelines for Regulation of Tariff at Major Ports, 2004 (the "2005 Guidelines");
- Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts, 2008 ("2008 Guidelines"); and
- Guidelines for Determination of Tariff for Projects at Major Ports, 2013 ("2013 Guidelines").

As far as tariff regimes were concerned, 16 port projects pre-dated the issuance of tariff guidelines in 2005, 12 were done under the 2005 Guidelines and 46 used the 2008 Guidelines.

The MoS data shows that there have been five terminations of concessions and that six projects are in distress.

As far as the five sample projects are concerned, three have achieved between 150% and 300% of volumes above that forecast and only one below (Chennai Container terminal operates at about 60% of forecast). This correlates with the feedback from the sector stakeholders that operating efficiencies and volumes were good and that the issues facing the sector were not primarily related to demand or economic circumstances but rather the tariff regime. It is noted that this is based on a small sample size of around 7% of all major port concessions.

The termination compensation for concessionaire default (representing the government's contingent liability on these projects) was confirmed as the lowest of book value, 90% of debt due and the actual project cost. Assuming that 90% of debt due is the lowest value, this maximum contingent liability would be around Rs44,890 crore.

Based on the stakeholder feedback from the Ministry of Shipping and other stakeholders, as well as a thorough and detailed case study prepared by the Indian Institute of Technology Madras and the IDFC for the Nhava Sheva International Container Terminal Limited (NSICT), it is possible to identify the following sector-specific issues:

- The tariff review process by TAMP has a sensible flexibility that allows periodic feedback between the parties in the PPP arrangement and there is the safety valve of dispute resolution as recourse in the event of disagreements;
- The 2013 Tariff Guidelines have brought more certainty to this process and the application of tariff changes;
- However, the MCA does not permit similar flexibility on non-tariff-related matters such as major changes in scope, operating conditions or market conditions;
- The obligations of the public port authorities should be clear with consequences for failure to meet these obligations because the concessions operate within existing public ports and rely on efficiency of the port as a whole to make the concessions competitive;

- Any inconsistency in levels of service between different contracts that relate to technical specifications should be standardized;
- Limitations on shareholding changes have increased over time and this limits market-related shareholding changes;
- The use of the escrow account for revenue over the whole period of the concession is tying up cash and an audit programme would be easier and more efficient;
- The change in scope limits of between 5% and 7% of the project cost in a year is a very limited range;
- The change in scope pre-CoD is advantageous to government in that 80% of a scope reduction must be paid to the port authority by the concessionaire at that time and this has implications for financing; and
- Some conditions in the MCA are not market-related (e.g. free storage for 10 days instead of the norm elsewhere of 30 days).

8. Identified Issues

In feedback from stakeholders, several issues were raised that were general in nature and did not relate to specific sectors.

The first related to an overall focus on investment sources as alternatives to the public fiscus rather than on efficiency gains that might arise from different forms of contracting. This resulted in a preference for concessions over annuity-type payments in general and in particular for bidders offering the largest concession fee (sometimes called a "negative" concession) payable for the right to operate the infrastructure asset rather than the one most likely to operate in a sustainable manner over a 5–30 year concession period.

The second related to project preparation, where time spent is often rushed resulting in inadequate identification of scope, cost and risk issues on projects.

The third related to optimistic bidding from the private sector where winning the bid was seen as more important than being able to make a sustainable return on investment. The extent of over-estimation of traffic demand in highways is a good example of this but the issue extends to other sectors.

The fourth is the use of financing structures that minimize genuine equity and promote the use of proxies such as shareholder loans that has concentrated risk in the banking sector.

Finally, poor contract management coupled with a very tight Model Concession Agreement has limited the ability of concessioning authorities to identify distress, to mitigate the causes of such distress and to implement changes to agreements to minimize the harm of such distress.

In order to categorize and commence a systematic process of addressing identified issues, an exercise was undertaken in creating a list of specific issues in categories ranging from physical to financial, economic, commercial and processes. The list is not exhaustive but does cover the major items identified by stakeholders interviewed and in the international comparator case studies as being issues that can bedevil PPP programmes around the world. The Table sets out the Issue, allocates it to a stage in the PPP cycle and a prioritization in terms of a simple ranking where 1 is higher priority for resolution and 3 is lower priority for resolution.

Table 3: Issues Identified across PPP Cycle

Issue	Stage In PPP Cycle	Priority Rating
1. Site and Specification		
1.1. Site Not Available	Pre-COD	1
1.2. Design and Scope Changes	Pre-COD	1
1.3. Regulatory Approvals Delayed	Pre-COD	1
1.4. Changes in Operating Requirements	Post-COD	2
2. Financial		
2.1. Failure to Reach Financial Close	Pre Financial Close	1
2.2. Base Case Financial Model	Pre and Post-COD	2
2.3. Changes in Interest Rates	Pre and Post-COD	2
2.4. Changes in Debt Financing Terms	Pre and Post-COD	2
2.5. Higher than Forecast Return on Equity	Post-COD	2
2.6. Lower than Forecast Return on Equity	Post-COD	2
2.7. Refinancing	Post-COD	1
3. Demand and Revenue		
3.1. Traffic Demand Above Forecast	Post-COD	2
3.2. Traffic Demand Below Forecast	Post-COD	1
3.3. Design Capacity Exceeded	Post-COD	3
3.4. Actions that divert traffic away (road closures or competing roads)	Post-COD	2
4. Economic and Tax Changes		
4.1. Macro-Economic Shocks	Pre and Post-COD	2
4.2. Changes in Interest Rates	Pre and Post-COD	2
4.3. Changes in WPI pre-Completion	Pre-COD	2
4.4. Changes in WPI post completion	Post-COD	2
4.5. Changes in Tax	Pre and Post-COD	2
4.6. Changes in Foreign Exchange Rates	Pre-COD	2
5. Contractual		
5.1. Delay to Completion	Pre-COD	1
5.2. Non-completion	Pre-COD	1
5.3. Factors outside Concessionaire's Control	Pre and Post-COD	1
5.4. Variations with cost increases	Pre-COD	2
5.5. Variations with cost savings	Pre-COD	2
5.6. Amendments	Pre and Post-COD	1
5.7. Compensation for Public Party Breach	Pre and Post-COD	2
5.8. Force Majeure	Pre and Post-COD	2
5.9. Change in Law	Pre and Post-COD	2

5.10. Uninsurable Events	Pre and Post-COD	3
5.11. Disputes and Settlement Agreements	Pre and Post-COD	1
5.12. Termination Payments on Private Party Default	Pre and Post-COD	3
6. Other		
6.1. Un-bankable Projects	Bidding Stages	2
6.2. Reckless Bidding on forecast revenue	Bidding Stages	1
6.3. Naïve Lending	Bidding Stages	2
6.4. Financial Structure	Bidding Stages	2
6.5. Accurate Reporting	Post COD	2

Having identified, categorized and listed the issues it is now possible to examine them in the context of international experience.

9. International Experience

A very detailed report on international experience, legal frameworks and case studies is attached as Annexure B. The comparator countries are Australia, South Africa, the United Kingdom and Chile and provide a rich source of data. Readers of this main report are encouraged to read the international comparator report as the section below only highlights the experience in dealing with the issues identified.

In preparing the international comparator report, interviews were conducted with senior officials in each of the jurisdictions and their personal experiences and views on the matter of renegotiation and amendment of concession agreements was recorded.

Each country examined has struggled with exactly the same issues that India has in terms of mounting and sustaining a PPP programme that achieves a roll-out of infrastructure with private capital. Each has struggled to maintain the position of significant risk transfer to the private sector. Each has made significant changes to its PPP policy, frameworks and contractual arrangements as part of the evolution of the PPP programme.

Each of these four countries permits amendments to their PPP Agreements and to varying degrees has a regulatory framework that specifies how this should be done. These range from the UK, which is the most flexible and has the highest delegation to the concessioning authority, to Chile, which prescribes a 20% of approved capital value limit in its concession law. South Africa requires approval of "material" amendments by the National Treasury.

All the countries have cases of changes and renegotiation and the case studies highlight the circumstances of each. Australia has a mix of cases ranging from a completely non-interventionist government to active renegotiation. The "let the market work" approach in the Sydney Harbor Tunnel and the Lane Cove Tunnel saw lenders step in and sell the concession in a competitive bidding. The original equity was wiped out and the new owners obtained the asset (being the concession and all its rights) at a deep discount. In Reliance Rail and Southern Cross Terminal Stations, government was much more active in negotiating amended agreements to stave off termination and provide a public service or save dispute costs.

Each country has institutional arrangements that separate the approval of amendments from the body that manages the process of achieving the amendments. In Australia and South Africa the respective Treasuries are involved in approval of significant or "material" amendments, in the UK the scope for amendment is prescribed by new EU directives on concessions and these are set out in detail in Annexure B1. In Chile the pervasive renegotiation and its negative impact has been countered to some extent in the 2010 Concessions Law by regulating the scope of amendments and requiring competitive tendering of work arising from such amendments.

In general, the outcomes both for the projects that were amended by renegotiation and in cases of liquidation of the concessionaires were good as the public services continued. Losses were distributed differently in each case, sometimes to equity, sometimes to lenders and sometimes to government. There was a high degree of flexibility in determining the public benefit from amendments; in most cases studied an objective assessment was carried out by a third party to verify that the public benefit exists. These range from Treasuries to legal counsel to the Auditor General.

Scope change regimes are very common and are used in the development (construction) and operation phases of PPPs to manage the changes that occur in long-term contracts.

In case studies, particularly those of Australia and South Africa where most data was available, the concession agreements applicable to the issue identified was examined for particular provisions that enabled the resolution of the issue. It is clear that in some cases the concession agreement was applied without amendment and in others significant amendments were permitted. This means that a high level of discretion is permitted in the matter of amendments, and that this discretion has to be applied in an objective and auditable manner.

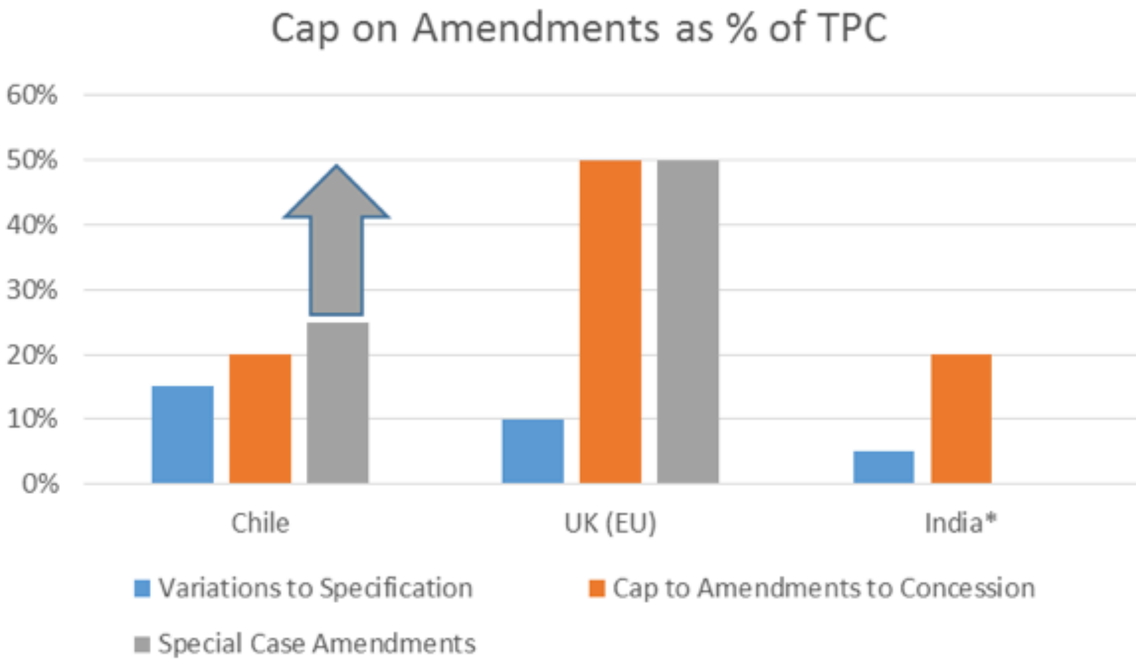
The emphasis in all cases was the avoidance of disputes and, as summed up by a treasury official in New South Wales who said: "*Usually a solution will be negotiated between the parties – as it takes a very long and expensive time to 'solve' a commercial dispute through the courts.*" As such, officials were generally empowered to make decisions that avoided long and costly disputes rather than wait for courts to permit or require amendments of agreements.

10. Applying International Comparators to the Issues

As a starting point, a broad-brush comparison was done between India and the regulated caps on the monetary value of amendments in the comparator countries. Only Chile and the UK (by way of the EU Directive 2014/23) have caps as a percentage of the contract or investment value. Both Australia and South Africa allow a greater range of discretion by using the concept of "materiality" or "significance" in prescribing limits for amendments, which is of course open to some legal interpretation issues as described in the international comparator report at Annexure B.

The comparison is shown in Graph 1 below:

Graph 1: Cap on Amendments in Comparator Countries



Notes:
In India the cap on amendments relate to changes in traffic demand only
Chile permits special case amendments above 25% subject to approval
Chile requires that above 5% of TPC the variation must go to public tender

The mapping of issues identified to the international experience and case studies for each is set out in the tables that follow in this section. Given that, even in the same jurisdiction, different solutions were applied it is necessary to record different options for some issues.

Work was then undertaken in examining the MCA's for National Highways and Major Ports as well as some actual concession agreements to contrast Indian practice with international practice on each issue. It is important to note that many of the differences are much nuanced and, while it may appear that an issue is addressed in a MCA, it is actually not. This may be because the commercial reality that flows from the contractual wording differs from the intention of the drafters of the MCA or because of actual practice on the ground does not follow the contractual requirements.

In illustration of this, two examples can be made. The first in the highways projects is how the concession period is varied depending on the traffic volumes. The commercial reality is that reduced traffic demand results in reduced revenue and an immediate cashflow problem for the concessionaire. Adding on a period of time at the end of the concession period will positively impact on a return on equity but will not ease the cash crisis of the concessionaire. A second example is the matter of land or enabling services provision by the public sector entity. There is no sense of the materiality of the land or service provision (or lack thereof) in a project because it is largely percentage based in the MCA obligations. A failure to provide or enable a piece of land may render the whole project financially unviable or it may have no effect at all. The difference is found in the details of each project.

As such readers of this report are urged not to simply say that an issue is addressed in the MCA, but rather to think through the commercial and practical implications of the issue in the context of the international comparator.

Table 4: Mapping of Issues against Indian and International Experience						
Issues Leading to Project Stress		International Experience			India Current	Possible Solutions
		How Dealt With	Case Example	Contractual Form	How Dealt With in MCA	Option No.
1	Site and Specification					
1.1	Site not available	Land made available pre-financial close or Compensation Event	Lane Cove Tunnel and Gautrain	Compensation Event	Obligation to provide site within 150 days of agreement or penalty payable (13.2)	1
1.2	Design and scope changes	Through specification committee (if zero cost increase) or variation (if cost increase)	M7 Freeway and Lane Cove Tunnel	Variation	Change in scope within 5% of TPC (17.1)	2
1.3	Regulatory approvals delayed	Compensation Event/ Renegotiation	Chapman's Peak Drive/ Lane Cove Tunnel	Compensation Event	Applicable Permits a CP to the MCA (4.1)	3
1.4	Changes in operating requirements	Variation	M7 Freeway and Lane Cove Tunnel	Variation	Change in scope within 5% of TPC (17.1)	1
2	Financial					
2.1	Failure to reach Financial Close	Termination – mitigated by requiring underwritten bids	All projects require firm financial underwriting	Terminate and retender	Termination and damages to NHA after failure to reach FC within 180 days unless related to a CP (4 and 22)	5
2.2	Base case financial model	Required for each project at commercial and updated at Financial Close	All projects require a base case financial model	Private party risk – no change	Financing package is from bid stage (other than Debt Due which may change)	4
2.3	Changes in interest rates	Private party risk covered by hedges	Interest rate is a private party risk	Private party risk – no change	Not covered	6
2.4	Changes in debt financing terms	Private party risk covered by loan agreements	All projects have long-term debt financing and changes are managed through refinancing and not renegotiation	Private party risk - no change	Not covered	6
2.5	Higher than forecast return on equity	Upside sharing above base case return to avoid 'excess profits'	Chapman's Peak Drive	Private party risk – no change	Not covered	6
2.6	Lower than forecast return on equity	Private party risk leading to financial restructuring	Sydney Harbour Tunnel and Lane Cove Tunnel	Private party risk – no change	Not covered	6
2.7	Refinancing	Refinancing gain share regulated. Prohibition on additional debt. Approval rights for public sector	Lane Cove Tunnel	Amendments	Not covered	17

Issues Leading to Project Stress		International Experience			India Current	Possible Solutions
		How Dealt With	Case Example	Contractual Form	How Dealt With in MCA	Option No.
3	Demand and Revenue					
3.1	Traffic demand above forecast	No trigger unless results in RoE above base case then sharing	Chapman's Peak Drive	Private party risk – no change	For every 1% increase in traffic a 0.75% decrease in concession period (cap of 10%)	8
3.2	Traffic demand below forecast	1) No trigger unless loan covenants breached then lender step-i n/ liquidation/ termination	Sydney Harbour Tunnel and Lane Cove Tunnel	Lender step In and substitution	For every 1% decrease in traffic 1.5% increase in concession period (cap of 20%)	7
		2) Loan to private company to make good shortfall, repaid once debt service complete	Chapman's Peak Drive	Renegotiation		
3.3	Design capacity exceeded				Capacity increase by Concessionaire at 16% RoE at 70:30 DE ratio with max 5-year period	
3.4	Actions that divert traffic away (road closures or competing roads)	Triggers compensation or renegotiation on no-better-no-worse basis	M7 Motorway/ Lane Cove Tunnel	Compensation Event	Increase in concession period for competing road and compensation on lost revenue	9
4	Economic and Tax Changes					
4.1	Macro-economic shocks	1) No trigger unless results in loan covenants breached i.e. Private party risk	Lane Cove Tunnel	Lender step in and substitution	Not covered	10
		2) Purchase of Equity by Government to enable financing in financial crisis	Reliance Rail	Renegotiation		
4.2	Changes in interest rates	No trigger as debt is hedged	All	Private party risk – no change	Not covered	10
4.3	Changes in WPI pre-completion	Standby equity used or Government Capital Grant increased by WPI	Gautrain	Private party risk – no change	Not covered	11
4.4	Changes in WPI post-completion	No trigger as revenue WPI indexed	All	Private party risk – no change	Not covered	6
4.4	Changes in tax	Private party risk unless discriminatory	All	Private party risk – no change	Included in Change in Law so no-better-no-worse principle applied (36)	6
4.6	Changes in foreign exchange rates	No trigger as exposure hedged. Exception where government takes forex risk	Gautrain	Private party risk – no change	Not covered	6

Issues Leading to Project Stress		International Experience			India Current	Possible Solutions
		How Dealt With	Case Example	Contractual Form	How Dealt With in MCA	Option No.
5	Contractual					
5.1	Delay to completion	1) If public party then compensation for delay to place private party in no-better-no-worse position	Lane Cove Tunnel	Compensation Event	If site-related then completion date postponed	12
		2) If no fault then relief on completion date granted	Lane Cove Tunnel	Relief Event	If Force Majeure then completion date extended	–
		3) If private party fault then relief on completion granted relief and liquidated damages payable	Lane Cove Tunnel	Private party risk – no change	If private party then liquidated damages payable (15.4)	–
5.2	Non-completion	Long stop date leading to termination	All	Terminate and Retender	12 month long stop date (15.5)	–
5.3	Factors outside Concessionaire's control	Private party bears financial risks but relieved from completion and liquidated damages	UK Standardisation	Relief Event	Not covered unless political or indirect political event	
5.4	Variations with cost increases	1) Public party ordered then costs as per schedule or no-better-no-worse	M7 Freeway	Variation	Change in Scope within 5% of TPC (17.1)	2
5.5	Variations with cost savings	2) Private party then cost saving shared	M7 Freeway	Variation	Not covered	2
5.6	Amendments	1) Can be made by public party and paid for to leave private party no-better-no-worse	Up to 50% of Value without retendering in EU Directives	Renegotiation	Change in scope within 5% of TPC (17.1) or change in law	13
		2) Can be in settlement of a dispute then in accordance with order or settlement agreement	Melbourne Southern Cross Station	Dispute	Not covered	
5.7	Compensation for Public Party Breach	Compensation on basis of no-better-no-worse	Lane Cove Tunnel	Compensation Event	Recovery of direct additional costs	13
5.8	Force Majeure	Suspension of obligations and termination on force majeure compensation	Chapman's Peak Drive/ Lane Cove Tunnel	Force Majeure	Political events, non-political events and indirect political events	13
5.9	Change in Law	No trigger unless discriminates, then compensation on no-better-no-worse basis	Lane Cove Tunnel/ Chapman's Peak	Compensation Event	Amendment and Compensation on no-better-no-worse basis	13
5.10	Uninsurable Events	Compensation by public party on no-better-no-worse basis measured against base case financial model	Melbourne Southern Cross Station	Compensation Event	Not covered	14

Issues Leading to Project Stress		International Experience			India Current	Possible Solutions
		How Dealt With	Case Example	Contractual Form	How Dealt With in MCA	Option No.
5.11	Disputes and Settlement Agreements	Settlement agreements to avoid dispute, amend the Concession Agreement	Melbourne Southern Cross Station	Renegotiation	Settlement agreements to avoid dispute, amend the Concession Agreement	15
5.12	Termination Payments on Private Party Default	Assessed or Tendered Market Value or x% of Debt outstanding at time of termination depending on jurisdiction	Chapman's Peak Drive/Lane Cove Tunnel	Terminate and Retender	90% of Debt Due (based on TPC) less claims outstanding	16
6	Other					
6.1	Unbankable Projects	Project screening by Treasury includes commercial bankability test	Sydney Harbour Tunnel and Lane Cove Tunnel		Not likely to receive approval or VGF	
6.2	Reckless Bidding on forecast revenue	Project breaches loan covenants leading to step-in by lenders and substitution/ sale of concessionaire	Lane Cove Tunnel		Limited ability to exclude reckless bids	
6.3	Naïve Lending	Lenders bear loss on sale of concessionaire so due diligence thorough	Lane Cove Tunnel		Limited ability to exclude bids with high risk for lenders	
6.4	Financial Structure	Influenced by debt underpin. Debt/ equity ratios assessed by Treasury commercial viability tests	Sydney Harbour Tunnel and Lane Cove Tunnel		Limited commercial viability testing	
6.5	Accurate Reporting	Audited accounts, inspections and audits, financial statements on 6 months' and year's performance; daily, monthly annual reports on traffic volumes and toll revenues.	Sydney Harbour Tunnel and Lane Cove Tunnel and Chapman's Peak Drive		Independent Consultant (20); Right to Inspect Records, Traffic sampling (21)	

11. Solutions to Consider

In Table 4 above, several issues were noted as having possible solutions and option numbers were shown. Table 5 below sets out in more detail these options for consideration.

Table 5: Options Matched Against Issues

Category	Option No.	Issue	Option
Compensation Event	1	Site availability	1. In cases of material impact on base-case financial model make 100% land availability a) prior to agreement or b) a Condition Precedent (CP) 2. In cases of non-material impact on the base-case returns, the public authority can place concessionaire in a no-better-no-worse position based on base-case financial model for loss of revenue
Contractual Flexibility	2	Variations due to design, scope and operating requirements	Increase scope for public agency variations to a) 10% of TPC approved by the public authority b) 20% approved by original approving authority so as to cater for scope creep and to formalize it c) any cost saving to be shared 50/50
Compensation Event	3	Delay in regulatory approvals	To the extent these cannot be closed out as CPs, will require an amendment to the agreement to bring the concessionaire back to no-better-no-worse based on the base-case financial model
Process/ Contractual	4	Base-case financial model	Make it obligatory for a base-case financial model to be carted by the concessionaire in each concession, audited and signed off by its lenders and reviewed by the public agency
Process	5	Delays in Financial Close	Bids should have firmer commitments to financing from lenders and investors to minimize the risk of bids that cannot be financed because they are not commercially viable
Private-party risk	6	Changes in financial conditions	Private party and lenders to cover this risk as commercial viability assessed pre bid. Specifically: a) Extend lender step in rights to explicitly allow for substitution of concessionaire (by sale subject to approval of the public authority) b) To extent that interest rate or forex hedges are not generally available then permit amendment to financing documents to allow lenders to restructure financing
Permitted Amendment	7	Traffic demand downside	1. Allow market forces to rule and permit step-in and sale of concessionaire in cases of liquidation. 2. Permit upside and downside sharing if revenue outside a band that, in terms of the base-case financial model, affects debt service (not equity)

Category	Option No.	Issue	Option
Contractual	8	Traffic demand upside	In return for down-side protection, revenue earned in excess of the base-case model RoE shared 50/50
Contractual	9	Compensation Events	Actions/inactions of public authority that breach obligations remedied by payment to place concessionaire in a no-better-no-worse position relative to base-case financial model
Contractual	10	General macro-economic shocks	Since these result in an impact on revenue (up or down) remedy is in traffic demand amendment. In material cases, either party may apply for amendment
Contractual	11	Changes in WPI pre-COD	Existing regime allows for adjustment of capital grants by WPI
Contractual	12	Delays in completion	To extent caused by public authority, will require an amendment to the Concession Agreement to bring back to no-better-no-worse based on the base-case financial model
Amendment	13	Amendments	Explicitly permit amendments where quantum of changes threshold is reached. Pre-COD and post-COD amendments should have different thresholds as pre-COD scope changes and amendments differ from those post-COD and are more common
Contractual	14	Uninsurable events	Permit no-better-no-worse if uninsurable event occurs that exceeds a threshold as % of TPC or PV of Operating Revenue
Contractual	15	Disputes	Explicitly permit settlement agreements in avoidance of disputes subject to thresholds for approval, subject to independent legal opinion and assessment as being at lower cost than dispute
Contractual	16	Termination on concessionaire default	Remains at 90% of debt due
Contractual	17	Refinancing	Refinancing gains shared between public and private at 50/50 on concessions and requirements for approval of refinancing by the public agency where the debt amount is increased

The reader will have noted the use of the term “material” in the context of a change or impact to the concession agreement. There is no precise internationally applicable guidance on this. However, all the jurisdictions and the EU Directives have a common approach that materiality is that that renders the concession materially different in character from the one initially concluded and would have affected the decision to grant the concession if known at the time. Chile and the EU directives have, as discussed above, set some quantitative benchmarks as a percentage of total project cost.

Additional detail on the major issues and options is set out in the tables below.

Table 6: Further Detail on Material Issues
Issue: Site and Specification
1.1: Site Not Available
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
In the majority of PPPs that involve the construction of infrastructure, the public sector entity will make the land available to the private party. During the Project Term the private party will manage the operation and maintenance of such land and infrastructure.
The financing arrangements and base case financial model are based on assumptions of land availability. Failure to provide the land may cause delays and losses to the private party.
Principle of Risk Transfer
The public sector entity retains the risk of land availability but the private party is expected to mitigate any loss or damage suffered.
International Examples
In most examples the land is made available pre-Financial Close in order to avoid risk retained by the public sector entity manifesting itself in a claim for damages. Lane Cove Tunnel
In the Gautrain project, the land could not be made available pre financial close so a range of specific mitigations were put in place. The Concessionaire lodged a significant claim for loss as a compensation event.
Indian Context
The MCA for National Highways states that there is an obligation on the public sector entity to provide the site within 150 days of agreement or a specified penalty is payable (Ref Para 13.5)
In some concessions (e.g. Barwa Adda and Chhapra-Hajipur Expressways) the amount of land to be made available pre Financial Close is 80% of the total site for the project. Failure to provide the 80% gives rise to one penalty, failure to provide the 20% post financial close gives rise to another. No right to further compensation or termination is explicit and the private party is obliged to complete the works before the project completion date as long as the compensation is paid.
Options
1. In cases of material impact on base-case financial model make 100% land availability a) prior to agreement or b) a CP 2. In cases of non-material impact on the base-case returns, the public authority can place concessionaire in a no-better-no-worse position based on base-case financial model for loss of revenue
Pros and Cons
If land is 100% available prior to financial close then the programme of concessions will slow down. It will however increase investor confidence and thus positively impact the benefits (social, economic and financial) of the projects.
If land is not 100% available at financial close then the public sector will be exposed to potential claims and a good dispute resolution process will be required. It will however allow projects to proceed to market faster.
Comments on Implementation
In feedback from stakeholders for highway projects, the land availability issue was ranked as extremely important to sustained investment. It appears that the compensation payable for late land is less than the losses suffered and it would be prudent to have greater certainty on land availability on future projects prior to financial close (ie aim for 100% land availability prior to financial close)

Issue
1.2 and 1.4: Design and scope changes and changes in operating requirements
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
No contract can contemplate all the future events that may arise, neither can every need and future output of the facility be accommodated in the specification.
Specification change mechanisms are thus common in concession agreements.
Principle of Risk Transfer
The private party is obliged to undertake any variation to the specification requested by the public sector entity. In doing so it is entitled to recover its costs and retain its return on its own investment.
The amount by which the original project cost may be varied is normally capped and on large variations the private party is obliged to put the work out to public tender.
International Examples
EU Directive 2014/23/EU allows up to 50% variation of contract value.
Chile limits this to 20% with a requirement that increases above 5% must be put to public tender.
South Africa allows changes that are not material to be approved by the public sector entity. Material changes must be approved by the Treasury.
In Lane Cove Tunnel (Australia) zero cost changes are agreed by a specification committee, changes with costs are done by formal variation.
Indian Context
The MCA sets a 5% limit on value of scope changes.
In actual concession agreements, a change in scope is contemplated and the private party must bear the costs of changes up to an aggregate of 0,25% of the TPC. It may decline the scope change if it exceeds 5% in any three year period or 20% in aggregate.
The public entity may require competitive bidding with the private party able to match the lowest bid.
Options
1. Increase the threshold of scope changes that the public sector entity can approve on its own to Increase scope for public agency variations to a) 10% of TPC approved by the public authority b) 20% approved by original approving authority so as to cater for scope creep and to formalize it c) any cost saving to be shared 50/50
2. Formalise the requirement for competitive tendering (preferably by the private party within the CA) on all variations above a specified value in the construction period and any variation in the operating period
3. Set and agree the context of no-better and no worse for variations by maintaining the base case return and setting mark-ups and overheads of the private party in the concession agreement
Pros and Cons
Increased control over scope changes may add to the contract management costs and use of resources. It does however accommodate changes in a flexible yet clear process.
Comments on Implementation
While the concession agreements do contain a basic process for variations to scope, this requires amendment to be more specific on limits of approval and needs tight control over costs (such as mark ups and impact on returns) and competitive bidding

Issue
2.1: Failure to reach Financial Close
Category (Contractual/Process or Institutional)
Process (partly contractual)
Context to Issue
The time between signature date and financial close is a period of great risk to the project as well as to the public sector entity and the private party. The more issues that need to be addressed/ closed out, the greater the risk.
Principle of Risk Transfer
In principle, the risk of not achieving financial close is transferred to the private party but in reality the need to implement combined with the sunk costs of procurement place the public sector entity in a high risk position.
It is in the project's interests to have the financing arrangements as far advanced as possible prior to signature (or even selection of the preferred bidder)
International Examples
In most jurisdictions examined, the bids must be accompanied by underwritten financing arrangements in order to be considered. Key risks such as interest rate and foreign exchange risks are mitigated with hedges so that in the period before financial close all but catastrophic economic changes can be accommodated. The only projects that failed to reach financial close were at the time of the financial crisis, necessitating a government financing intervention in some cases.
Indian Context
The MCA and concession agreements require the lodging of performance security that replaces the bid security. These may be called in events of failure to reach financial close.
There is also a termination event in case of failure to reach financial close.
Options
1. Bids should only be accepted with firmer commitments to financing from lenders and investors.
2. Assessment of commercial viability by these lenders should be a part of the evaluation of bids and a key consideration in awarding the bid.
Pros and Cons
The Indian PPP programme is strong enough to maintain a competitive market of investors and the risk of losing biddings because of the requirements is the only negative aspect.
Comments on Implementation
Feedback from stakeholders is that there are a number of projects that are stuck in a pre-financial close stage and unable to complete financing arrangements. Because of the complexity of the situation it may be difficult to apportion blame for this state.
It is simpler and more aligned with good practice to require firmer financing support for bids, thus avoiding the need for protracted acquiring of financing by the preferred bidder.

Issue
2.5 and 2.6: Higher/lower than forecast Returns on Equity
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
PPPs vary in the extent to which the private party's investment is at risk. Where full demand risk is passed over, in theory the private party is subject only to competitive forces in determining its required return on investment/equity.
However, given that the assets are public assets and that many risks are underwritten by the public sector (termination risk for example), there is a strong case for sharing of the benefits of an upside on the return. (e.g. where inflation on toll revenue is higher than an increase in interest rates on debt, significant returns can be made with no commensurate risk carried by the private party.)
Principle of Risk Transfer
The principle of risk–return relationship is that, in return for an unfettered return the private party assumes all the risks of the commercial operation of the concession. To the extent that projects fail to deliver the required return then the private party can and should be exposed to the market forces applicable at the time.
To the extent that all the risk is not taken by the private party (e.g. in cases of explicit revenue support or even where there is implicit support such as termination payments) then there is a legitimate expectation of up-side sharing by the public sector.
International Examples
Australian examples of Lane Cove Tunnel and Sydney Cross City Tunnel are of massive equity losses in cases of liquidation after lower than forecast demand.
South African examples of up-side sharing of returns above base-case returns in Chapman's Peak Drive and N3 Toll Concessions.
Indian Context
The MCA does not cover any eventuality of risk sharing in case of higher or lower returns. This is combined with limited information on financial performance and little confidence in the accuracy of such data.
The MCA and concession agreements permit changes to the concession period based on traffic being above or below forecast. This is dealt with in the tables dealing with traffic demand.
Options
1. Allow market forces to rule and permit step-in and sale of concessionaire in cases of liquidation.
2. Permit upside and downside sharing if revenue outside a band that, in terms of the base-case financial model, affects debt service (not equity). a) The concessionaire takes the first risk in relation to traffic b) Once a DSCR of 1.00 is reached, the public sector agency provides support up to cover operating costs and maintain the DSCR of 1.00 c) The support is in the form of a temporary, interest-bearing advance to the concessionaire, which is repayable once cash flows improve above a DSCR of 1.0 over a period of time to be agreed with lenders d) The support can continue for a maximum period of 18 months whereafter the support terminates and, failing additional shareholder or sponsor support for the project, the concessionaire will be in default under the loan agreements and a concessionaire default termination will occur with the support amount advanced deducted from the termination payment made
3. In return for down-side protection, revenue earned in excess of the base-case model RoE shared 50/50.
Pros and Cons
If protection is given to debt service then investment decisions will be based on likelihood of support and not merits of the project.
If not given then potentially impacts on sustainability of projects and continued service provision
Upside sharing allows the private sector to benefit from its efficiencies but enables the public sector to benefit from the upside as well. There is a risk that an argument will be raised that if it benefits from the upside then it should take a risk on the downside.
Comments on Implementation
It is not impossible to permit the public sector to provide downside protection to prevent project failure as an option at its sole discretion.
Upside sharing is a legitimate exercise of creating a public benefit balanced against the assumption of termination payment risk.

Issue
2.7: Refinancing
Category (Contractual/ Process or Institutional)
Contractual
Context to Issue
It is normal for the private party (concessionaire) to rearrange its debt financing on more favourable terms once the construction phase is over and the operations have stabilized.
This refinancing generally allows the project to take on more debt for the same revenue profile and, by so doing create the opportunity for some form of extraordinary dividend to be paid to shareholders.
Principle of Risk Transfer
The principle is that the concessionaire has raised the capital for the project financing and is entitled to rearrange it. To the extent that this re-arrangement has created a benefit in the form of a dividend or additional free cash the Concessionaire is entitled to the refinancing gain.
This is, however, an oversimplification. Firstly the refinancing raises additional debt that can overleverage the project, may increase the government's contingent liability and often is as a result of improved macro-economic conditions over which the concessionaire had no control.
As a result most PPP frameworks around the world regulate the referencing of projects by requiring explicit government approval and a sharing of the refinancing gain.
International Examples
The UK, Australia and South African PPP frameworks all provide for and regulate refinancing and the method of its sharing between private party and the public sector entity.
Indian Context
The MCAs and concession agreements viewed had no prescripts for refinancing.
Options
1. Refinancing gains shared between public and private at 50/50.
2. A procedure and method for approval and calculation of the refinancing is introduced into all new concession agreements.
Pros and Cons
The advantages of a regulated refinancing environment is that government is able to monitor and approve of arrangements that affect the project and ensure that a long term view is taken on its sustainability. Refinancing's have been the subject of popular resistance in many countries as it is perceived as a major benefit for a few shareholders created from a public asset.
The disadvantage is that the private sector will claim that government is seeking some form of undeserved enrichment. This is countered by the need to incentivise government to support the refinancing and to allow the gains to be deployed for the public benefit.
Comments on Implementation
Refinancing gains should be shared between public and private at 50/50 on concessions and there should be requirements for approval of refinancing by the public agency where the debt amount is increased. A distinction between beneficial and rescue refinancing should be made. Rescue refinancing's are in cases of project distress and should be permitted and supported in the interests of permitting the project to continue without termination.

Issue
3.1 and 3.2: Traffic above or below forecast
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
Similar to returns on equity above or below forecast, (which differs because traffic demand only covers the revenue/ income side of the return on equity) the private party is subject to the risk that traffic (and hence revenue) differs from that forecast in the base case financial model. On a long term project with unknown future economic conditions, this risk is very hard to quantify.
The matter is complicated by the fact that, in order to win the bid, a bidder may well over-estimate the traffic and revenue and so turn a risk into a probable outcome in the form of an under-preforming project.
This is exacerbated by tendering conditions where underwriting by independent financiers is not required and where the award is based on the lowest cost or highest revenue parameter
Principle of Risk Transfer
The principle is that the private party, having tendered on the traffic and revenue forecast takes the risk of the actual demand and revenue varying to its loss or benefit.
In a rational bidding environment (i.e. where bidders have adequate information and financiers moderate exuberant bidding) this risk is mitigated is mitigated in competitive environments to the point that it is accepted.
International Examples
Lane Cove Tunnel, Sydney Cross City Tunnel allowed concessionaire liquidation and sale
Chapman's Peak Drive offers down-side protection to permit debt service
All jurisdictions examined have bidding procedures that limit the opportunity for opportunistic and/ or unfinanceable bids.
Indian Context
The MCA and concession agreements allow for every 1% increase in traffic a 0.75% decrease in concession period (with a cap of 10%) and for every 1% decrease in traffic a 1.5% increase in concession period (with a cap of 20%)
The increase in concession period has, at best, a long term impact on RoE and does not provide any short terms relief in the form of liquidity or protection from insolvency. Because the concession periods are longer than the debt tenors, it is also difficult for sponsors to "bank" such increases in period.
Options
1. Amend bidding conditions to exclude speculative or opportunistic bids
2. Require underwritten bids with financiers required to sign off on traffic projections
3. Allow market forces to rule and permit step-in and sale of concessionaire in cases of liquidation.
4. Permit upside and downside sharing if revenue outside a band that, in terms of the base-case financial model, affects debt service (not equity). a) The concessionaire takes the first risk in relation to traffic b) Once a DSCR of 1.00 is reached, the public sector agency provides support up to cover operating costs and maintain the DSCR of 1.00 c) The support is in the form of a temporary, interest-bearing advance to the concessionaire, which is repayable once cash flows improve above a DSCR of 1.0 over a period of time to be agreed with lenders d) The support can continue for a maximum period of 18 months whereafter the support terminates and, failing additional shareholder or sponsor support for the project, the concessionaire will be in default under the loan agreements and a concessionaire default termination will occur with the support amount advanced deducted from the termination payment made
5. In return for down-side protection, revenue earned in excess of the base-case model RoE shared 50/50.
Pros and Cons
Amended bidding processes will prevent or limit speculative bidding.
Revenue guarantees, if not structured extremely carefully will distort the market.
Comments on Implementation
Offering explicit support on lower- than forecast revenues is not recommended, especially if bidding processes are not amended to preclude speculative bids.

Issue
4.1: Changes in Economic Conditions
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
Changes to economic conditions can result in one or more of the following:
a) Changes to traffic demand
b) Changes to cost and or availability of financing
c) Changes to inflation rates
d) Changes to input costs
Principle of Risk Transfer
In countries with well-developed secondary financial and insurance markets, the party best able to mitigate the risk of economic and financial changes is the private party who provides various forms of financial risk mitigation instruments and costs these into the base case financial model.
However, as evidenced by the recent financial crisis, the government is the insurer of last resort and cases of economic force majeure place costs on the public fiscus
International Examples
Lane Cove Tunnel is an example of changed economic condition impacting on traffic and causing liquidation of the concessionaire.
Reliance Rail is an example of the purchase of equity by Government to enable concessionaire to obtain financing in the financial crisis
Indian Context
There is no general provision for changes in economic conditions other than the changes in concession period for traffic demand above or below forecast
Options
1. There should be no action unless the loan covenants breached under any circumstances
2. Where financial conditions have changed the private party and lenders should cover this risk as the commercial viability was assessed pre bid. Government can facilitate this by: a. Extending lender step in rights to explicitly allow for substitution of concessionaire (by sale subject to approval of the public authority) b. then permit amendment to financing documents to allow lenders to restructure financing to the extent that interest rate or forex hedges are not generally available
3. In material cases (i.e. a form of economic force majeure), either party may apply for amendment under a general amendment provision (see below).
Pros and Cons
Protection against market movements distorts incentives and permits gaming of the system by bidders.
The absence of any ability or option to deal with significant economic changes may erode long term value for money/ public benefit
Comments on Implementation
The more explicit the support, the more the intervention distorts incentives. As such a general ability to amend the concession agreement is preferred so that a regulated flexibility is introduced.

Issue
5.6: Amendments (General)
Category (Contractual/Process or Institutional)
Contractual, Process and Institutions
Context to Issue
It is generally accepted that long-term concession agreements are incomplete in that they must contemplate significant uncertain future events. These future events, if not accommodated within a contractual framework of how they will be dealt with may causes disputes or even termination of the underlying agreements.
At the same time, concession agreements, if they are to transfer risk effectively, must not be so changeable that the original intentions of the contracting parties is undermined along with the public benefit sought in the first place.
Principle of Risk Transfer
The principle is that all risk is transferred to the private party except where explicitly stated otherwise in the Concession agreement. This is coupled with a process by which the concession agreement may be amended with agreement by both parties.
International Examples
Each concession agreement examined had an amendment enabling provision. This enabled and regulated the change contractually between the parties.
Each jurisdiction has an enabling and regulating framework that permits the public sector entity to undertake, motivate and execute required amendments in compliance with public policy and law
Each jurisdiction has an oversight and/ or approving authority for material amendments
Indian Context
The MCAs and concession agreements do not explicitly permit amendments. As such public sector entities are reluctant to contemplate any form of amendment.
Options
Explicitly permit amendments to the concessions where quantum of change limits are reached. Apply principle of approvals as follows: a) Thresholds for approval of amendments relative to % of TPC for pre-COD and % operating revenue post-COD. The greater risks of cost increases occur pre-COD and the thresholds should reflect this. b) All amendments should be based on objective criteria and the causes should not have been foreseeable at the time of financial close. c) Absolute threshold on value of amendments set at [20]% of TCP or PV of operating revenues d) Assessment by objective, independent body of: • Causation and fault • Materiality • Risk assessment • Financial cost assessment • Adverse consequences assessment e) Financial equilibrium to be maintained f) If no agreement then termination in accordance with the concession agreement may follow
Pros and Cons
An amendment regime provides the required flexibility in long term concessions
Inappropriate or unregulated amendments may diminish the public benefit underlying the concessions
Comments on Implementation

In the absence of any value-for-money criteria, use 90% of debt due as the absolute limit of any payment by the State in any amendment or termination and retendering that requires payment. This is in return for full access to revenue less operating costs and in any lesser payment the proportion is maintained.
Issue
5.7: Compensation Events
Category (Contractual/Process or Institutional)
Contractual
Context to Issue
The concession agreements set out risks and processes for dealing with risks, and must be explicit on how these are to be dealt with in terms of relief to the party incurring such occurrence of risk. Since the vast majority of risks related to delivery of the outputs of the concession agreement are allocated to the private party entity, this relief is provided to the private party.
Principle of Risk Transfer
The private party usually undertakes to ensure service commencement by a particular fixed date and to continue to provide the services for the duration of the concession agreement. There may, however, be events which result in the private party, through no fault on its part or otherwise attributable to it, being unable to meet this obligation. In these circumstances, the private party should be excused from liability for failure to commence or provide the services.
International Examples
There are generally categories of events that excuse the private party from performance: a) Relief Events: These are events which may arise at any stage during the project term which are best managed by the private party entity (although not necessarily in its control) and for which the private party entity bears the financial risk, but in respect of which neither liquidated damages nor rights of termination should arise. b) Compensation Events: These are events that are clearly at the institution's risk and in respect of which the private party entity should be compensated. c) Force Majeure Events: These are a limited set of events which may arise during the project term through no fault of either party, which are best managed by the private party entity (although not in its control) and in respect of which rights of termination can arise.
Indian Context
There are various specific provisions for relief in cases of specific events (e.g. penalties payable for land related delays) as well as Force Majeure provisions.
There are no general provisions for relief from unknown or unforeseeable events.
Options
Actions/inactions of public authority that breach obligations remedied by payment to place concessionaire in a no-better-no-worse position relative to base-case financial model.
Events that are outside of either parties control can result in extensions to the time for completion.
Pros and Cons
A clear regime allows for settlement of claims without protracted and expensive disputes
A clear definition of no-better-no worse will be required backed by a detailed base case financial model
Unless regulated and implemented with a strong contract management approach, this may be abused by the private party
Comments on Implementation

There should be no provision for general relief in the form of a claim for performance or compensation available to the private party entity outside of these three categories of events, nor logically should there be given the principles of risk transfer in PPPs.
Issue
5.11: Disputes and settlement agreements
Category (Contractual/Process or Institutional)
Process
Context to Issue
Disputes arise in many concessions. The manner in which they are adjudicated varies (e.g. arbitration, court proceedings etc.). Most processes become lengthy and expensive with an emphasis on legal interpretation using legal practitioners.
The use of settlement agreements as an alternative to such dispute resolution processes may achieve equitable outcomes at a fraction of the cost.
Principle of Risk Transfer
In a dispute the determination of the matter is in the hands of an independent person/ tribunal. As such the outcome is unpredictable and risks are better managed by negotiation and agreement
International Examples
Melbourne Southern Cross Station where a settlement agreement was used to avoid a formal dispute where there was probably liability on both sides. The process was audited and overseen in such a way that the settlement was hailed as a triumph of common sense.
Chile has established a standing technical panel to hear disputes and propose settlement agreements prior to formal arbitration.
Indian Context
Settlement agreements are not excluded but there appears to be a reluctance to deviate from the formal dispute resolution process because of perceptions of undue discretion and personal liability for the officials making the decisions
Options
Specifically permit settlement agreements to avoid dispute amend the concession agreement
Make these subject to the same oversight as amendments to the concession agreement
Provide for a fixed serving technical panel to listen to technical and economic disputes between the public sector entity and the concessionaire and issue recommendations as a dispute resolution mechanism prior to arbitration
Pros and Cons
A technical panel of experts has cost implications and requires a specific legal mandate.
The potential advantage is that it permits for a structured process of reaching settlement agreements in a short period of time.
Comments on Implementation
The experience of professionals from a variety of fields from the private, public, and academic sectors should have public resolutions, thus promoting transparency

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12. Process for Approving Amendments

It is very important that a formal process for amendments based on established thresholds. While suggestions have been made on what these thresholds could be based on international comparators, it is necessary that for each sector some additional consideration be given to the choice between quantified percentages and qualitative "materiality" type considerations.

As is the case in Chile, where it is recognised that pre-COD amendments are more likely to be initiated by the public authority on the grounds of scope changes and risks on land and regulatory approvals, it is prudent to separate pre-COD and post COD amendments

There should be no room for suggestion that the concessioning authority acts in anything other than a solid governance arrangement that uses a facts-based and objective assessment of amendments.

Rather than establish a new approving authority for amendments it makes sense to utilize existing approval structures for the concessions as set out in the Guidelines for Formulation, Appraisal and Approval of Central Sector Public Private Partnership Projects (the Guidelines) published and issued by the Ministry of Finance (DEA). In fact, the Guidelines could easily be extended to incorporate a process for amendment of concessions.

A high-level process is set out in the table below. This involves four stages as follows:

Table 7: Proposed Process and Timing of Amendments

Stage	Outcome	Action By	Information/ Analysis Required	Estimated Time to Complete
Stage 1	Identification of project in distress	Public Concession Authority	Brief overview with financial and contractual information	1 week
	Initial review	Public Concession Authority	1. Is the distress material? 2. Is there a causation or fault apparent? 3. Is the concessionaire willing and committed to providing sufficient information to support further investigation?	4 weeks
Decision to Proceed to Next Stage by Public Concession Authority				
Stage 2	Detailed project analysis	Public Concession Authority (who may appoint a Financial Consultant)	1. Financial analysis of revenue, financial performance on loan covenants and equity returns 2. Non-financial performance 3. Causation 4. Risk comparison 5. Consequences of termination 6. Assessment of opportunity costs 7. Assessment of public economic benefit	6 weeks
	Options analysis	Public Concession Authority	1. Lender or public authority step-in 2. Financial support 3. Relief from obligations under Concession Agreement	2 weeks

Sign off by Public Concession Authority and Line Ministry for Submission to Approving Authority				
Stage 3	Comparison with benchmarks	Approving Authority	1. Causation and fault 2. Materiality 3. Risk assessment 4. Financial cost assessment 5. Adverse consequences assessment 6. Review of public economic benefit	4 weeks
	Finalisation of renegotiation documentation	Approving Authority	1. Setting of renegotiation parameters	1 weeks
Approval by Approving Authority				
Stage 4	Proposed amendments to Concession Agreement	Public Concession Authority	1. Full disclosure of long-term costs, risks and benefits 2. Comparison with original risk position 3. Comparison with distressed risk position	3 weeks
	Approval of renegotiated Concession Agreement	Approving Authority		1 week

The same delegation of powers as currently allocated between the line Ministry, the Standing Finance Committee and the PPPAC would be used to determine the Approving Authority.

Key components of this process would be:

12.1. Objectivity

It is likely that the public concessioning authority is as interested in the outcomes of the Concession Agreement renegotiation as the private party and may also have played a role (active or passive) in the events leading to the project distress. As such it is unsuited to decide on the necessity of renegotiation or to oversee the renegotiation or to approve its outcomes.

Renegotiation can have significant financial (explicit and contingent) outcomes. Some form of fiscal oversight similar to that used in the original approval mechanism is required.

In addition to the use of the existing approval mechanisms for considering amendments to concession agreements, there is also merit in considering the establishment of independent technical panels for each sector with a mandate to consider disagreements related to the valuation of amendments A well-resourced panel with appointed members known to be independent and capable of assessing the merits of a disagreement on amendments will signal government commitment to a structured process that will improve market certainty and reduce spurious calls for renegotiation.

Such panels would have good precedent in the current Indian Telecoms and power sectors where the Telecom Regulatory Authority of India (TRAI) and the Central and State Electricity Regulatory Commissions (CERCs and SERCs) play valuable roles as independent arbiters with non-binding dispute resolution powers.

There would be costs associated with such a body, however these would be outweighed by the benefits accruing to India's massive PPP sector programmes.

12.2. Consistency and replicability of principles

A programme-wide approach can be implemented if the process and approvals are formalized.

Resources can be pooled, creating a knowledge base in dealing with complex legal and financial issues.

12.3. Fact based

Approvals must be based on a high level of information in various categories. These would include:

- Financial performance information
  - Actual revenue vs forecast revenue
  - Actual performance against loan covenants (actual ratios)
  - Return on Equity (ROE) against forecast
  - Non-financial performance information
  - Performance against specification in construction
  - Performance against specification in operations
  - Penalties levied
  - Formal disputes and disagreements in terms of Concession Agreement
  - Causes of project distress
  - Concession Agreement provisions related to amendment or renegotiation of key terms
  - Ex-post risk allocation assessment
- Consequences of project default

12.4. Ascertainable criteria

It will be necessary to establish a set of criteria or "benchmarks" to be applied to each proposed renegotiation that are quantifiable and ascertainable. In other words, the case for a renegotiation can be made explicit and recorded so that the decisions made are rational and defensible.

It is proposed that these should include:

- Evidence that the project distress is:
  - Material and likely to result in default under the Concession Agreement at some future point should it continue;
  - Not caused by the private party; and
  - Likely to cause adverse outcomes for the government and/or users of the concession assets.
- Evidence that a renegotiated Concession Agreement:

- Is likely to have direct cost implications for the government that are less than the financial outcomes of doing nothing;
- Is likely to have social benefits or avoided costs that, in the absence of a formal, defined Value for Money (VFM), provides better long-term outcomes; and
- Is not materially different in terms of risk allocation to the Government of India.

It is necessary to set out reasons that would not apply for any application for amendment of a concession agreement. These would include:

- Any event of distress that was foreseeable at the time of financial close;
- Any event that would affect the concessionaire as any other company in its ordinary course of business (for example general changes in law);
- Any impact arising from assumptions made or risks taken any the concessionaire in preparing its bid;
- Any impact arising directly or indirectly from the performance, action or inaction of the concessionaire; and
- Any failure of any associated party to the concessionaire to perform or provide finance to the concessionaire.

12.5. Outcomes from Government of India perspective

The final decision for a renegotiated Concession Agreement must thus be based on:

- Full disclosure of long-term costs, risks and potential benefits;
- Comparison with the financial position for government at the time of signing the Concession Agreement; and
- Comparison with the financial position for government at the time prior to renegotiation.

This will permit the Government of India to make a decision based on an awareness of likely outcomes over the foreseeable future of the concession.

12.6. Programme perspective

Consideration must be given to a programme-wide approach to renegotiated Concession Agreements. This means that in each sector there must be an awareness of the:

- Number of projects in distress (so that if above a certain percentage, a programme-wide approach rather than a project-by-project approach can be taken);
- Causes of distress (so that systemic factors can be identified);
- Adequacy of contractual mechanisms to deal with such distress; and
- Adequacy of contract management systems to deal with or avoid such distress.

This will permit the Government of India to manage and monitor the renegotiations and their outcomes as a portfolio across all sectors.

12.7. Refinancing

The principle behind refinancing is that the concessionaire has raised the capital for the project financing and is entitled to rearrange it. To the extent that this re-arrangement has created a benefit in the form of a dividend or additional free cash the Concessionaire is entitled to the refinancing gain.

This is however an oversimplification. Firstly the refinancing may, if uncontrolled, raise additional debt that can overleverage the project, may increase the government's contingent liability and often is as a result of improved macro-economic conditions over which the concessionaire had no control. Refinancing gains should thus be shared between public and private and the norm is at 50/50 on concessions (it is a much higher share for government on annuity or availability based PPPs) and there should be requirements for approval of refinancing by the public agency where the debt amount is increased.

As a result most PPP frameworks around the world regulate the referencing of projects by requiring explicit government approval and a sharing of the refinancing gain. The UK, Australia and South African PPP frameworks all provide for and regulate refinancing and the method of its sharing between private party and the public sector entity. All require that any proposed re-financing be approved by the public authority and should not result in a debt balance at any time between the date of the refinancing and the end of the concession greater than the projected debt balances in the original base case financial model.

13. Conclusions

The following conclusions can be drawn from this report:

13.1. India has emerged as one of the leading Public Private Partnership (PPP) markets in the world, due to several policy and institutional initiatives taken by the central government and a sustained effort in various sectors to accelerate the implementation of PPP projects and programmes.

13.2. India has also developed a strong framework for the approval of PPP projects at a central government level with appropriate oversight exercised by bodies independent of the particular projects and aware of the fiscal implications of PPPs.

13.3. Various challenges have arisen along with the acceleration in pace of the roll out of PPPs. A blockage in the bidding process of some PPP programmes has developed with private sector developers and financiers stating that they will not participate in any project bidding given the perception that participation has become too risky and because their exposure to projects in implementation that may be in some distress is too high.

13.4. The common themes that emerge across sectors are that risk allocation is viewed as one-sided; several sovereign obligations are not being met, especially with regard to land and right-of-way provisions in many highway PPPs.

13.5. On the private sector side it is apparent that there has been opportunistic and unrealistic bidding in terms of revenue sharing that has placed concessions at risk of failure as economic conditions worsened over the last five years.

13.6. As far as the contractual elements of the PPPs is concerned, there is a general consensus that the Model Concession Agreements (MCAs) are inflexible and that, outside a narrow set of Change in Law and Force Majeure events, there is no ability to change the terms of the concession.

13.7. The stakes are very high. The National Highway PPP programme has grown into a Rs2,27lakh crore investment of which more than 90% is financed via probate entities or public banks. It is possible to estimate conservatively that Rs1,55lakh crore is funded by debt (banks). The maximum contingent liability at 90% of debt due for the whole programme could be as high as Rs1,40 lakh crore (about USD23 billion). For the Major Ports there is no overall estimate of contingent liability but the termination compensation for concessionaire default on five sample projects is calculated as Rs44,890 crore.

13.8. The report, based on stakeholder inputs and a comparison of concession agreements with international good practice, identifies 34 issues in six categories and compares the manner of dealing with them across international comparator countries of Australia, South Africa, the United Kingdom and Chile.

13.9. The four international comparator countries match well with India. Each country examined has struggled with exactly the same issues that India. Each has made significant changes to its PPP policy, frameworks and contractual arrangements as part of the evolution of the PPP programme.

13.10. Each of these four countries permits amendments to their PPP Agreements and to varying degrees has a regulatory framework that specifies how this should be done.

13.11. All the countries have cases of changes and renegotiation and the case studies highlight the circumstances of each.

13.12. Each country has institutional arrangements that separate the approval of amendments from the body that manages the process of achieving the amendments.

13.13. In order to deal with the issues identified, changes need to be made in the contractual and institutional environment such that the government has the option to amend concession agreements in a structured manner where decisions are based on a understanding and or quantification of causation and fault; materiality; changes in risks, financial costs; adverse consequences and public economic benefits.

13.14. Existing governance and oversight arrangements used for the approval of concessions prior to signature should suffice to provide an objective institutional arrangement for approval of the amendments to concession agreements.

13.15. A useful mechanism has been used in Chile whereby disputes can be avoided through the use of independent technical expert panels and could be useful in India.

13.16. Changing the bid evaluation criteria to require bids that are at least partially underwritten and approved by prospective financiers and to permit the exclusion of speculative bids will assist in minimizing the need to amend concession agreements.

14. Recommendations

It is recommended that, in conjunction with other reforms around project selection and contract management currently underway in the DEA:

14.1. The Model Concession Agreements in National Highways and Major Ports be revisited and amended to explicitly permit amendments of concession agreements;

14.2. Such amendments, to the extent that they are material in the context of the original concession agreement, be approved by the same approving authority that approved the entering into of the original concession agreement;

14.3. Such approval be based on an objective assessment of causation and fault; materiality; risk; financial cost; adverse consequences and public benefit;

14.4. In the absence of other value-for-money criteria, 90% of debt due should be used as the absolute limit of any payment by the State in any amendment or termination and retendering that requires payment. This is in return for full access to revenue less operating costs and in any lesser payment the proportion is maintained;

14.5. In a consultative way with a panel of legal experts and PPP practitioners the MCAs be examined and amended to bring them into closer alignment with international practice on other matters identified in this report, including variations, land provisions, compensation events, refinancing, changes in traffic and revenue and economic and financial changes;

14.6. The process of reaching settlements before formal dispute resolution processes be re-examined and the possibility of using sector specific independent technical panels to assess disputes with a view to settlement assessed; and

14.7. The bid evaluation process be amended to require more firmly underwritten bids showing higher levels of involvement of lenders and to eliminate bids that are demonstrably out of line with realistic commercial (cost and revenue) projections.

Annexure A: Meeting Notes

A. Introduction to and Summary of Meeting Notes

This is the first of a number of reports as part of the development of a framework of the Renegotiation on PPP Contracts. It is based on a number of meetings held with public and private stakeholders who have a variety of interests in the PPP Programme in India. It will form part of an Inception Report that combines international experience in renegotiation with empirical data on the projects in major sectors in the Indian PPP programme with these views expressed by individuals and company representatives.

It should thus not be read in isolation from these reports or interpreted in any way as identifying either problems or solutions in relation to the PPP Programme. In setting some context to the discussions, the meetings were informal and participants were encouraged to provide feedback to three basic questions:

- What is your involvement in the Indian PPP Programme?
- What is your view of the problems in the Programme?
- What are possible solutions?

There was no request for information on the positive aspects of the Programme, which has delivered one of the most remarkable set of private investments in infrastructure in modern history and has placed India front and foremost in the world's PPP programmes.

In the discussions certain themes emerged:

1. There is a bottleneck in current bidding for PPP projects.
2. This is related to the experience of bidders who have been involved in or are involved in PPP projects at implementation or operation stage.
3. These experiences relate to various factors:
    a. The PPP Programme started well and created an enthusiasm in both public and private sectors
    b. The economic climate and in particular GDP growth and liquidity of debt and capital markets created an exuberant market for investors in what appeared to be an attractive asset class
    c. This exuberance occurred in projects put to bidding in a largely unregulated manner (although largely based on international good practice and sound preparation). The focus was on realising investment in a large scale on developing infrastructure (e.g. the National Highway Development Plan).
    d. Different sectors developed in different ways and developed specific issues. For example the Major Ports PPP Programme has issues with projects in operation that rely on a series of Court orders staying the tariff regime changes on the earliest concessions, while the

National Highways have some very successful projects that go back to the inception of the national PPP Programme.

4. The common themes that emerge across sectors are:
   a. Risk allocation is viewed as one sided.
   b. Sovereign obligations are not being met, especially with regard to land and right of way provision in the Highways PPPs.
   c. Project preparation is seen as inadequate in terms of particularly land availability and traffic demand forecasting because the process is often rushed. This is exacerbated by a reliance in the model CA for Highways on base case financial data for use in determining, inter-alia, compensation payable on termination.
   d. From private sector stakeholders, there is a nostalgia for annuity type PPPs, ostensibly because of a "false" premise that demand risk should be transferred to the private sector.
   e. There has been opportunistic and unrealistic bidding in terms of revenue sharing that has placed concessions at risk of failure as economic conditions worsened over the last five years. This has not been tested against long term viability by government agencies bound by cost driven procurement rules.
   f. There is a general consensus that the CA's are inflexible and outside a narrow set of Change in Law and Force Majeure events, there is no ability to change the terms of the concession.
   g. There needs to be an ability for an independent view on the changes to the terms of the CA where necessary to grant relief for events outside the control of the concessionaire (no-one interviewed advocated a blanket rescue for distressed projects).
   h. All interviewed requested some form of feedback and expressed great interest in the assignment.

B. Meeting Notes

These Notes are those taken by the Author and do not purport to be complete and detailed minutes of the meetings. Their purpose is to provide context to the various reports to be prepared as part of this assignment. They have not been verified by the persons who participated in the meetings.

1. IDFC
   1.1. Date of Meeting: 5 May 2014
   1.2. Organisations represented
   1.3. IDFC Ltd
      1.3.1. IDFC Project Finance
      1.3.2. IDFC Foundation
   1.4. Individuals
      1.4.1. Cherian Thomas CEO IDFC Foundation

1.4.2. Representative from IDFC Project Finance

1.5. Summary of Discussions

1.5.1. The Indian PPP programme is one of the world's success stories in terms of investment in and delivery of projects.

1.5.2. But there are some underlying issues that, if not addressed could cause the programme to falter. These relate to projects that are in operations where demand is not that anticipated, to projects pre-CoD where difficulties in land acquisition or right of way have caused delays and in pre –Effective Date projects where financing is proving extremely difficult to obtain.

1.5.3. On operational projects, lenders are in a generally satisfactory position, it is the developers who are being squeezed. Debt servicing is taking place although some projects require rescheduling. While debt service obligations are being met, many financial covenants and ratios are breached.

1.5.4. The real pressure is felt by project sponsors where any increase in capital costs or delays are funded from equity. Since lenders do not drive the programme, the equity sponsor pain is causing a reassessment of bidding on current and future projects.

1.5.5. Each project will require a different approach. There is no generic approach or policy because each project is unique in its specific risks and issues. However there are some programme improvements that are required:

1.5.5.1. Commencement of Operations Date – developers are squeezed to get this certificate, for example, if land acquisition is late. Currently only 80% availability required at Financial Close.

1.5.5.2. The government should consider this as too generic and ensure that the land issues are addressed up-front.

1.5.5.3. Supplementary Agreements are being signed with a waiver of rights to claim by Concessionaires in order to obtain a COD certification. There are between 10 and 15 such projects and while this may work on projects where disputes are avoided, it does negatively impact on future projects.

1.5.5.4. The specifications are being increased, driving up capital costs while traffic revenue is generally lower than expected, causing a "pinch point" of risk for developers/ bidders.

2. Ministry of Roads Transport and Highways (MoRTH)

2.1. Date of Meeting: 6 May 2014

2.2. Organisations represented

2.2.1. MoRTH

2.3. Individuals

2.3.1. Mr Rohit Kumar Singh, Joint Secretary MoRTH

2.3.2. Mr Abishek Mukherjee PPP Expert (ADB)

2.3.3. Other MoRTH Officials

2.4. Summary of Discussions

2.4.1. A CRISIL study showed very high (75%) levels of commercial traffic on the 100 highways surveyed.

2.4.2. The underlying problem is inadequate project preparation, especially in the context of demand forecasts and land acquisition and in terms of comparing project options.

2.4.3. However, the private sector make-up of contractors as developers has led to a "short-termism" in terms of expected returns.

2.4.4. There is also a limited number of eligible concessionaires who are overleveraged in terms of exposures to PPPs.

2.4.5. The NHAI is measured on the number of projects and kilometres awarded.

2.4.6. At present, investors and banks are risk averse (there is also an "informal" Reserve Bank limit on banks' exposure to infrastructure).

2.4.7. Lender exposure is to the 90% of base case debt amount to be paid by the government on concessionaire default. As a result they tend to be conservative to limit this exposure to that base case amount regardless of the actual project financing needs.

2.4.8. The bidding process is short and financiers are not required at this stage, with the result that a long time is taken in getting to Financial Close once a preferred bidder has been appointed.

2.4.9. Only 80% of the land needs to have been acquired at Financial Close. This is too little and should be 100%.

2.4.10. The role of the States in land acquisition is also problematic as they have the responsibility to provide the land but no real "ownership" of the project, which would create the incentive to deal with the thorny acquisition process.

2.4.11. There was discussion around the events following a project becoming "distressed". This includes lender loan restructuring, possible lender step-in (unlikely unless concessionaire behaviour is causing the problem, and then termination).

2.4.12. There has been some refinancing to date.

2.4.13. The study will need data on the number of distressed projects and the potential exposure of Government in the event of default.

3. Ministry of Shipping

3.1. Date of Meeting: 6 May 2014

3.2. Organisations represented

3.2.1. Ministry of Shipping

3.3. Individuals

3.3.1. Mr N Muruganandam, Joint Secretary

3.3.2. Mr Anant Kishore Saran, Deputy Secretary

3.3.3. Mr Dinesh Kumar, Deputy Secretary

3.3.4. Mr Anuj Agarwal, ADB Representative

3.3.5. Mr Datta – Undersecretary

3.4. Summary of Discussions

3.4.1. Approximately 50 port concessions have been signed in the major ports so far.

3.4.2. 21 were signed in the past year.

3.4.3. Some 30 are thus operational.

3.4.4. A Concession Agreement with the Singapore Ports Authority was signed on the day of this meeting.

3.4.5. There are 12 mainland Major Ports. These are owned by the Federal Government and fall under the control of the MoS. All other (non-Major) ports are owned by the States and, although many have their own concessions, are not the responsibility of the Ministry.

3.4.6. The tariff regulator is the Tariff Authority for Major Ports (TAMP). The Major Ports Trust Act, 1963 was amended by the Port Laws (Amendment) Act 1997 to constitute TAMP.

3.4.7. The first concessions were signed in 1997/8 and they involve existing and new berths. The existing berth concessions are operational concessions of existing facilities, whereas new berth concessions require higher capital investment by concessionaires.

3.4.8. The model is that of BOT with royalties as a percentage of gross revenue payable to the concessioning authority as the single main bidding parameter since the tariffs are regulated by the setting of caps. This was the case for all but the first three concessions, where there was a royalty per container.

3.4.9. There is no VGF in Major Port concessions.

3.4.10. The concessions started with a model licencing agreement developed with IDFC support. Since 2008 there has been a Model Concession Agreement as well as model bidding documents, such as RFQs; RFPs, etc.

3.4.11. Under the Model CA the maximum concession is 30 years.

3.4.12. The tariff regime has undergone changes over time:

- Guidelines for Regulation of Tariff at Major Ports, 2004 (the "2005 Guidelines").
- Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts, 2008 (the "2008 Guidelines").
- Guidelines for Determination of Tariff for Projects at Major Ports, 2013 (the "2013 Guidelines").

3.4.13. These various guidelines are all still applicable to the concessions that were signed during the period of application of these Guidelines.

3.4.14. Under the 2013 Guidelines, the Concessionaire may increase the tariff cap by 15% upon meeting prescribed performance standards.

3.4.15. The two permissible forms of relief for the Concessionaire under the Model Concession Agreement are Change in Law and Force Majeure. Changes in the tariff regulation are explicitly excluded from the definition of Change in Law in Article 13 of the MCA.

3.4.16. The current scenario in non-major ports is that they are Greenfield developments: limited regulation, low revenue share and no tariff regulation and have taken a growing market share (handling 42%of the total cargo).

3.4.17. There are four baskets of issues in the Major Ports concessions:

- A request for a change from royalties to revenue share because the tariff is decreasing in comparison to the rise in royalty payments.
- The 2005 guidelines set a 15% RoCE (Return on Capital Employed) to determine the tariff for the next three years and are based on traffic projections. Tariffs are typically lower than those determined under the 2013 Guidelines. Also a portion of the royalties was allowed to be counted as costs for input into the tariff model. The exact formula here has not been clear and has led to some problems in the past.
- Conditions in the MCA are not market-related (e.g. free storage for 10 days instead of the norm elsewhere of 30 days).
- Changes in market conditions, such as iron ore in one region not being mined so that the commercial conditions are materially different from those at bidding.

3.4.18. Many concession companies have gone to court to obtain stay orders to keep themselves whole and stay any tariff changes. No final orders have been issued so there is a form of limbo at present. Without the stay order some concessions would be liquidated (a form of Concessionaire Default).

3.4.19. The Concessioning authority is required to pay 90% of outstanding debt on such termination.

3.4.20. The MoS seeks guidance on how to accommodate change in future CAs and how to handle the change requests from current concessions.

3.4.21. There has been an impact on the bidder interest in concessions tendered and responses have been "muted" for the last two years.

3.4.22. Most of the concessions have been funded with foreign capital investments from large multi-national port operating companies such as PSA and Dubai Ports World. There is very limited domestic debt sourced from Indian banks.

3.4.23. The Ministry does not believe that there is any under-declaration of revenue or other form of manipulation of the revenue share as the Concessionaires prepare good financial reports, there are audit rights and all revenue is paid into an escrow account.

3.4.24. It was requested that information on 2 to 3 projects in terms of the investment amount, debt equity ratios and outstanding debt be given to the DEA for passing to the WB.

3.4.25. The MoS has suggested changes to the MCA including:

- Including tariff regime changes as Change in Law.
- A role for the Independent Engineer throughout the Concession Period.

3.4.26. These changes must go through a process of ratification by the Planning Commission and DEA prior to going to the Cabinet.

4. The WB would prepare a template of information required and pass this

5. Feedback Infrastructure

5.1. Date of Meeting: 6 May 2014

5.2. Organisations represented

5.2.1. Feedback Infra Pvt Ltd

5.3. Individuals

5.3.1. Mr Vinayak Chatterjee

5.4. Summary of Discussions

5.4.1. Mr Chatterjee is adamant that the Indian PPP Programme is facing a crisis that can be resolved by managing the entire chain of project planning and preparation through tendering and contract management.

5.4.2. He also believes that a move back to annuity type contracts is warranted as the demand risk assumed by the private parties was inappropriate with demand being largely related to GDP growth.

5.4.3. This was thus a mistaken perception of risk transfer.

5.4.4. There are sovereign obligations that are not being met, meaning that the risk transfer is one-sided and there are insufficient consequences for not meeting these obligations. Particular instances are land-related obligations and environmental approvals.

5.4.5. Given the long-term nature of the concession agreements, they are by their nature incomplete and subject to "black swan" events (unexpected, high impact events that are rationalised afterwards as having been foreseeable).

5.4.6. As such, Concession Agreements need to have the capacity to be renegotiated on reasonable grounds.

5.4.7. In this context there have been some completely inappropriate bids from some seeking to win bids at any cost.

5.4.8. Mr Chatterjee confirmed that, in his view, the financial markets have sufficient liquidity to fund future projects but the PPP market has "frozen".

5.4.9. Also, a renegotiation process for projects stuck in the implementation phase is warranted.

5.4.10. Inappropriate bidding must be prevented by introducing a rational screening process in the evaluation of bids.

5.4.11. Major Ports are also a problem (in addition to the national highways) with 33 concessions seeking resetting of the revenue share model to a more equitable model.

6. IDFC Alternatives

6.1. Date of Meeting: 7 May 2014

6.2. Organisations represented

6.2.1. IDFC Alternatives Private Equity

6.2.2. IDFC Alternatives Infrastructure

6.3. Individuals

6.3.1. Prasad Gadkari (Partner Private Equity)

6.3.2. Milind Joshi (Partner Infrastructure)

6.4. Summary of Discussions

6.4.1. The IDFC has been intimately involved in the PPP market for 16 years from an advisory, lending and equity investment perspective.

6.4.2. The IDFC currently has an USD12billion investment in infrastructure, with USD3billion in six funds that range from private equity to project finance.

6.4.3. The IDFC has a banking licence and participates as a lender.

6.4.4. They have their highest equity exposure investments in corporates across the transport and energy sectors.

6.4.5. From a private equity perspective they have exposure in three road concessions and one airport concession as well as two ports with a shareholding range of between 15% and 40%. The total investment is around USD1,3 billion.

6.4.6. In terms of the view on the PPP programme, the process starts with advisory services to the NHDP, leading to annuity-based contracts. This first round was highly successful in attracting Rs3000 crore in eight projects in 15 months.

6.4.7. The programme in National Highways thus started as a huge success with the CAs signed at the low point in the economic growth with high interest rates. The roads were built and attracted significant traffic demand, which grew well.

6.4.8. The seven phases of the NHDP then commenced, but the preparation was rushed and not anywhere near the quality of the first projects. Demand was high though and bidding was enthusiastic and even opportunistic.

6.4.9. Changes in the Model CA were then introduced.

6.4.10. Many developers had little “skin in the game” as they simply borrowed funds for equity investments.

6.4.11. Rent-seeking become common on both public and private sector sides. Government specifications increased (raising capital costs), corruption increased and the time to close decreased.

6.4.12. From the private sector, bidding to win became opportunistic and in 2005 the Delhi Gurgaon expressway was a negative concession.

6.4.13. Some factors listed for the status quo were:

- Underprepared projects.
- Lack of capacity at NHAI relative to the scope of work to be undertaken.
- Award on the basis of lowest cost without testing the viability of the bid.
- State support is often missing notwithstanding contractual obligations.
- Inflexible CAs that do not adapt to changes in circumstance.

6.4.14. This is not a question of blaming any one sector. Government had underprepared projects, bidders had bid recklessly, investors and bankers had made poor investment decisions and all had assumed that economic growth would continue steadily.

6.4.15. As a result, more than 300 projects are in some form of distress and litigation is possible, which would be a slow and painful process.

6.4.16. Some recommendations on solutions:

- As much information as possible should be gathered.
- There should be a differentiated solution for projects at the operational/construction and bidding stages.
- Government should use a trusted advisor to devise solutions.
- Project preparation must improve.
- Government should divert more projects to the EPC mode to improve cashflow in the construction sector.
- A bail-out of equity at par should be considered where the Concessionaire has been affected by external events.
- Institutions should be strengthened.
- Incentives should be increased (e.g. tax incentives to invest in infrastructure).

7. SBI Capital Markets

7.1. Date of Meeting: 7 May 2014

7.2. Organisations represented

7.2.1. SBI Capital Markets Limited

7.3. Individuals

7.3.1. Mr Rajat Misra

7.4. Summary of Discussions

7.4.1. The ADB has a start-up equity stake in SBI Capital.

7.4.2. They focus on private equity, capital markets, project finance and advisory work.

7.4.3. They are the No. 1 Project Finance investor by value in India.

7.4.4. The PPP model does work as it creates a great efficiency in infrastructure delivery.

7.4.5. The SMI view on the problems in the PP market are:

- Overbidding took place and should not be rewarded.
- Land-related issues delay the projects and push up costs (100% of the land should be available on the effective date).
- The relationship between NHAI and Concessionaires is not an equal one and there is a concern that any claims/litigation will result in some form of exclusion from future bidding.
- The main problems are in the pre-CoD period where the land issues are the main cause of project distress.
- At least five projects in this pre-CoD stage are in distress.

7.4.6. Liquidity is a problem as projects are simply not bankable in the current environment.

7.4.7. Refinancing has taken place but not in the past two years. There are limits on the increase in debt (30%) in terms of NHAI prescripts and the amount of debt to be provided by new lenders (50%).

7.4.8. There is a need for an independent regulator.

7.4.9. Any bailout must not reward fault on the part of concessionaires.

8. IPPTA

8.1. Date of Meeting: 8 May 2014

8.2. Organisations represented

8.2.1. Indian Private Ports and Terminals Association

8.2.2. DP World

8.3. Individuals

8.3.1. Mr SS Kulkarni, Secretary General IPPTA

8.3.2. Mr Anil Singh, Senior VP and MD Subcontinent DP World

8.3.3. Mr Kevin D'Souza, Director Commercial and Business Development DP World

8.4. Summary of Discussions

8.4.1. Mr Singh asked if Government was serious about the renegotiation of Port Concessions as previous initiatives had come to nought. In any event, he requested feedback on progress of the assignment.

8.4.2. DP World has been involved in PPPs since 1997 and thus has had concessions under all the tariff regimes (2005, 2008 and 2013 Guidelines).

8.4.3. They had the following issues:

- The Model Concession Agreement prepared by the Planning Commission and adopted by the MoS had been extensively used but making changes had proved difficult and MoS and the PC were "at loggerheads".
- The port operating industry advised that the 2005 Guidelines would not work and that the 2008 Guidelines were also problematic. It is only since the 2013 Guidelines that the industry has felt that there is a workable tariff regime.
- The fact that the Government revenue share had not been considered as part of the cost base for tariff determination prior to 2003 had made matters difficult, and certainty on the matter was urgently required. Since each tariff Guideline is not retrospective, there are serious inequities in the concessions and even in the same ports. In one port there are four separate regimes for tariffs. They feel that this is anti-competitive.
- When compared with Non-Major Ports, the operators feel that regulation has hampered development of the Major Ports and that greater reliance on the market functioning is appropriate.
- They cited the change in ratios of volumes shipped in Major and Non-Major Ports from 90-10 to 40-60 since the Port Concessioning programme began.
- They believe that S48 of the Major Ports Trust Act is the "applicable legislation" referred to in the CAs and thus there is no legal impediment to changing the tariff regime to cover all concessions.
- Without this certainty, current operators will be wary of bidding in future concessions.

8.4.4. Should regularisation of all old concessions not take place the old concessions cannot be sustained and will fail. They are currently surviving because of the staying orders of the courts.

8.4.5. On non-tariff matters the following issues were raised:

- Policy changes should apply to all contracts.
- There should be a re-examination of the risk allocation in the model CA because the focus is currently on risk taken by the Concessionaire and the obligations of the public port authorities is largely ignored. Timelines for construction of connecting or back-of-port infrastructure are vague, as are pilotage and dredging insofar as they relate to the work necessary to make the concessions competitive.

- There are gaps in consistency in levels of service between different contracts that relate to technical specifications that should be standardised, e.g. draught differentiation in the same port.
- Limitations on shareholding changes have increased over time (from 100% permitted originally to the current 50% decreasing to 26% three years after CoD).
- The use of the escrow account for revenue over the whole period of the concession is unnecessary and should be for a limited period only (if it is for security then parent company guarantees would be more efficient than tying up cash, and if it is for transparency then an audit programme would be easier and more efficient).
- The change in scope limits of between 5% and 7% of the project cost in any year are very onerous.
- The change in scope pre-CoD is advantageous to Government in that 80% of a scope reduction must be paid to the Port Authority by the Concessionaire at that time.
- Lenders' rights are not in accordance with Project Finance principles (this was not expanded upon).
- Subordinated debt is treated as equity (the model CA includes subordinated loans as part of Debt Due so this is not clear).

9. Axis Bank

9.1. Date of Meeting: 7 May 2014

9.2. Organisations represented

9.2.1. Axis Bank

9.3. Individuals

9.3.1. Mr Prashant Joshi, EVP and Head Corporate Credit

9.3.2. Mr Parthasarathi Mukherjee, President, Corporate Banking

9.3.3. Mr Prahsant Murkute, VP, Infrastructure Business Group

9.4. Summary of Discussions

9.4.1. Government is correct in its view on the sanctity of contracts, but there is also a case that this has contributed to project distress by way of late land and Right-of-Way obligations leading to delays.

9.4.2. Issues that have also arisen are:

- Competing roads have been constructed in cases that reduce the financial return of concessions.
- The absence of any regulator for toll tariffs.
- Dispute-relation processes are not efficient.

9.4.3. The NHAI used to provide the land and move utilities but these are now concessionaire responsibilities so project risks have increased.

9.4.4. Axis Bank has not had any projects to which it is exposed terminated but there have been at least two restructuring of projects post-COD.

9.4.5. Audits have been carried out and have had a beneficial impact on revenue reporting.

9.4.6. The Bank is now far more careful on sponsor selection and is very wary of overly aggressive bidding.

9.4.7. The Bank does very little in terms of involvement at bidding stage and does project and sponsor due diligence on preferred bidders. It does its own traffic demand studies before committing to a project.

9.4.8. They have identified equity shortages as a problem and a general tightening of credit from sponsors, investors and lenders. The next few years are expected to be testing.

9.4.9. There is very limited foreign equity in Indian PPPs.

9.4.10. In general, current projects are not bankable and those stuck pre-Financial Close are unlikely to reach FC.

9.4.11. As far as possible solutions are concerned:

- All projects must have their RoW and land issues resolved before bidding.
- There should be a punitive provision for Government breach.
- The time for payment of termination compensation needs to be specified in the MCA.
- The approval process for design drafts by third parties (e.g. Railway Ministry/ Environmental Authorities/ Forestry) needs to be clear and time-bound.
- Political will needs to be strengthened.
- Negative grants should be treated with great suspicion.
- Availability payments should be reconsidered as the norm.

10.National Highway Agency of India

10.1.Date of Meeting: 8 May 2014

10.2.Organisations represented

10.2.1. National Highways of India

10.3.Individuals

10.3.1. Mr Anand Kumar Singh, General Manager, Contract Management

10.4.Summary of Discussions

10.4.1. The NHAI is doing its own study and believes that the DEA/WB study is too wide-ranging to be useful.

10.4.2. The current regime is working as it allows for an adjustment to the revenue share or an interest-bearing loan to support projects in distress.

10.4.3. There needs to be an analysis of the cash impact of external events on the project, ignoring traffic behaviour, and then amending of the revenue share to Government.

10.4.4. Conceptually it would be best to build financial calculation variables into the CA up front so that, in the event of some external unforeseen impact, a form of deferred compensation model based on set parameters can be applied to provide relief to the Concessionaire but keep Government in the same position over time.

10.4.5. In order to provide information to the DEA/WB team, it was requested that a risk matrix be provided to enable prioritisation of the risks into high, medium and low.

11.AshakaBuildcon

11.1.Date of Meeting: 8 May 2014 (Telecon)

11.2.Organisations represented

11.2.1. Ashoka Buildcon Limited

11.3.Individuals

11.3.1. Mr Satish D Parakh

11.4.Summary of Discussions

11.4.1. Ashoka Buildcon has been a major developer in PPP highways since 1996. They have 18 projects in operation, six under construction and three that have reached their expiry date and been handed back to Government.

11.4.2. Ashoka plays the role of developer and is concerned about the challenges pre-COD. Since the average time from bidding to implementation is 18 months and since the construction period is around 30 months, up to four years pass between bidding and COD with high risk of traffic changes.

11.4.3. Interest rates also change, leaving them exposed.

11.4.4. Competing roads are seen as the Concessionaire's risk but are completely outside of the Concessionaire's control.

11.4.5. Land and Right of Way are also major issues since the 80% land availability norm is applied on brownfield projects to the existing lanes, meaning that all the new lanes are subject to high land availability risk.

11.4.6. There are also instances where sections of the road are not available and yet they achieve COD so as to commence tolling (partial) even though up to 8km might be two lanes with suppressed traffic demand resulting from that limiting link.

11.4.7. The bids in the market are not well prepared as old feasibility studies are not updated and the land issues are still evident.

11.4.8. Banks are reticent to lend money into projects and the market is currently very restrictive.

11.4.9. Suggested improvements:

- Full implementation of the new Land Acquisition Act by Government.
- Design flexibility and scope definition to be clear so that approvals for the project from other agencies are easily obtained.
- Some sharing of the traffic risk.
- The tariff should be linked to inflation.
- Linking changes in the interest rates to changes in the concession period.
- Provide protection to Concessionaires if traffic falls below a certain percentage.
- Protect the Concessionaire from overloading.
- For projects in distress through no fault of the Concessionaire, there needs to be some form of compensation model. Lending more or rescheduling debt is not sufficient as it does not compensate equity.

11.4.10. The annuity-based model is much preferred.

11.4.11. Resistance to tolling has placed limits on the number of tolling stations.

11.4.12. There is no toll evasion enforcement support from the authorities.

12.GMR Airports

12.1.Date of Meeting: 9 May 2014

12.2.Organisations represented

12.2.1. GMR Airports

12.3.Individuals

12.3.1. Mr Ashok Kumar Pandey

12.4.Summary of Discussions

12.4.1. GMR Airports has the Indira Ghandi International Airport Concession as well as for the Hyderabad and Bangalore airports. GMR concession airports have some 37 million pax/annum.

12.4.2. The IGIA airport concession has a 26% shareholding in the Joint Venture Company for the Government represented by the Airports Authority of India.

12.4.3. It is a 30-year renewable concession (renewal is conditional on certain criteria being met but is essentially at the election of the JVC).

12.4.4. There is a 46% revenue share between JVC and AAI.

12.4.5. Key lessons have been:

- Many variables were left open – including the regulatory regime and the tariff philosophy. This meant that substantial negotiation post-award was required and flexibility in the Operation, Management and Development Agreement (OMDA) between AAI and JVC was required.

- Traffic has varied substantially over the past two years with the result that the focus on revenue generation from non-traffic sources has increased. It is also intended to attract lower cost airlines who bring "feet" through terminals.
- The OMDA has a Supporting Committee that has committed support to the airport. This enabled it to be completed in time for the Commonwealth Games with 60 approvals required.

12.4.6. AAI and JVC operate as partners in terms of managing the OMDA and reporting to a Cabinet Committee.

12.4.7. Planning is done in the form of a Master Plan drawn up every 10 years with certain triggers for investment (e.g. a fourth terminal is triggered at 60 million pax/annum).

12.4.8. The revenue is in the form of:

- Airline fees.
- User development fees.
- Airport development fees.
- Non-aeronautical revenue.

12.4.9. The tariffs are determined every five years based on a target RoE.

12.4.10. Non-aeronautical revenue subsidises user fees

12.4.11. The revenue share is 47% on gross revenue.

12.4.12. There is an airports regulator (AERA) who determines the tariff based on the RoE approach.

12.4.13. The revenue input into the tariff is post-revenue share.

12.4.14. The interface between commercial (PPP) and sovereign (e.g. customs, ATC etc.) needs work – a SLA would be ideal.

12.4.15. Change in the OMDA is limited, Change in Law is limited to that provided in the State Support Agreement (not yet examined).

13. JSA Advocates and Solicitors

13.1. Date of Meeting: 9 May 2014

13.2. Organisations represented

13.2.1. JSA Advocates and Solicitors

13.3. Individuals

13.3.1. Vishnu Sudarsan

13.3.2. Poonam Verma

13.3.3. Amit Kapur

13.3.4. Amitabh Kumar

13.3.5. Vishrov Mukerjee

13.4.Summary of Discussions

13.4.1. A wide-ranging discussion on Regulator functions in India and the differences between sectors. While the highways sector has many features of a regulated industry, there is no economic or technical regulator. Major Ports and Airports are regulated.

13.4.2. Some discussion on the risk allocation in the various MCAs covered the range of relief for concessionaires. This is limited to Change in Law and Force Majeure. It appears that Indian CAs have a high burden of risk given that the concept of Relief and Compensation for Events does not exist. As a result, Concessionaires are unable to seek interim contractual relief in the sense of relief within the contract for external events of Concession Authority Breach and must rely on Dispute Resolution Procedures (mostly arbitration) or court orders.

13.4.3. Force Majeure does not generally allow compensation – time relief only or termination if it persists beyond a set period.

13.4.4. There is some precedent of re-set tariffs although these have either been by the regulator (power sector) or in the form of a settlement agreement under a court-based litigation.

13.4.5. There is very little precedent of renegotiated CAs outside of these precedents. This may be as a result of concern on procurement outcomes being challenged post-renegotiation or because of the lack of an enabling clause in the MCAs.

13.4.6. The concept of renegotiation would not be impossible to introduce as these challenges are surmountable. However, there would have to be a strong basis of public benefit behind such renegotiation.

13.4.7. There is also the concept of commercial impracticability where a contract cannot be implemented as is. This legal principle could also serve as a basis for renegotiation provided the test for such impracticability is met.

Annexure B: International Comparator Report

1. Purpose

The purpose of this report is to provide a brief review of current international practice associated with the renegotiation of Concession Agreements, with a view to supporting the establishment of an objective, fact-based approach to amending the terms of Concession Agreements based on ascertainable cost, risk and social benefit and neutrality or benefit for the Government of India.

The report is presented in two parts. The first deals with current documented principles and practice in PPP contract amendments and the second is a comparison of four countries with substantive and successful track records of PPPs, namely Australia, South Africa, the United Kingdom and Chile, with a particular focus on national road networks

PART 1: PRINCIPLES AND PRACTICES

2. Introduction

Because Public Private Partnerships (PPPs) involve large investments that are made and recouped over a long time, they are typically arranged or structured in the same way around the world. The predominant form of financing is project or "limited recourse" finance and is familiar to any PPP practitioner in any country. As a result of this standardized approach to financing, a similarly standard approach has been adopted in developing the PPP agreements (often known as Concession Agreements) in different jurisdictions. The main advantage of this has been that international consortia of developers, contractors and financiers have able to participate in different jurisdictions with a good understanding of the rights and obligations that will accrue to them under the agreements. There has also been a movement across different jurisdictions towards a standardized allocation of risks between public and private parties to the agreements. The public sector, acting through some public concessioning agency, invariably prepares the projects and the agreements through a feasibility study and procurement process to the point where the project agreements are signed and the projects are implemented. Some form of best practice in regulatory framework "enables" the PPP projects to the extent that they increase in number and in the number of sectors to which they are applied.

So, if this level of standardization in all areas of PPP project development and implementation is so apparent, why would any form of change or amendment to the contract be required? Surely the participation of rational investors in projects they were able to examine prior to commitment is sufficient evidence that the risks and rewards have been allocated correctly?

The most obvious answer is that it is impossible to predict the range of possible risks and to allocate these with precision over 20 to 25 years in a complex environment. As such, the key to any PPP does not lie in the ownership of financing method, but rather in how the balance of risk and rewards is set out so as to be able to survive significant changes over a long period of time.

Another answer is that investors in PPPs are not perfectly rational. They, like the stock markets on which they are often listed, go through periods of exuberance and paranoia-like caution. In the exuberance of the initial stages of a PPP program, risks might be seen as the unlikely “bad things” that happen to other investors. And in the wary period that follows the occurrence of that risk, risks are perceived as certain events that will bedevil the very project the investor is scrutinizing.

As a result of changing perception, the private party tends to opt for renegotiation when it perceives that project risk has been incorrectly underestimated (Bracey, 2013) and greater public sector support is desired. Similarly, if the private party overestimates the risk or achieves better-than-expected returns, the public sector often seeks the right to renegotiate the contract so that returns and risks are more equitably shared.

This concept of equitable sharing in the so-called “upside” of PPP Agreements is important in the context of the PPP projects being a form of publicly-owned social or economic infrastructure. Considerable effort has gone into the prescribed sharing of returns above a threshold limit (HM Treasury, 2012) or even of refinancing to the benefit of the sponsors generating a refinancing gain share for the public sector. Particularly in developing countries, the interests of the poor and other civil society stakeholders should be considered in all phases of the strategy and negotiation process (Bracey, 2013).

Thus, the legislative framework in many countries describes the content of Concession Agreements and related documents and permits changes in terms and reallocations of risk.

In addition, because amendments that amount to a material change in the terms of the Concession Agreement may offend public procurement principles of competition and transparency as well as diminish the value of such a contract to the public sector, regulatory frameworks in various jurisdictions also prescribe processes for such changes.

3. International Experience

This section presents findings from international practice as to the drivers for renegotiations and implications thereof.

A number of concessions have been renegotiated across the globe and one of the biggest challenges is that the renegotiations are pervasive. Guasch (2004) examined close to 1,000 Latin American Concession Contracts awarded between 1980 and 2000 and found that 30% of all contracts were renegotiated.[4] Different sectors show different propensity for renegotiation with 54.4% in the transportation sector (roads, ports, tunnels and airports) and 74.4% in the water sector. Renegotiations often favor the concessionaire, where 62% of the cases led to tariff increases, 38% to extensions of the concession term and 62% to reductions in investment obligations. This pattern is said to be similarly evident in developed countries (Gomez-Ibanez and Meyer, 1993).

Between 1990 and 2003, only 3% of PPPs worldwide were cancelled (Thomsen, 2005). It is more common for renegotiations to take place than for PPPs to be cancelled. Government is typically much more likely to initiate renegotiations due to contract vagueness, lack of public sector lending and absence of independent regulators (Bracey, 2013). PPPs are a useful mechanism for procuring much needed public services but it is worth noting that an estimated 50%

of PPP deals never reach the financing stage, with half of those needing renegotiation as the projects are constructed and implemented (Bracey, 2013).

4. Absolute Prohibitions on Renegotiations

In researching this report, the author could not find any absolute prohibition on amendment of PPP agreements in any jurisdiction covered in the report. The European Union is considered to be one of the most formal and regulated procurement environments and may be taken as a reasonable representative of good practice on the subject of renegotiation of Concession Agreements. The European PPP Expertise Centre (EPEC) PPP Guide[5] acknowledges that, while some renegotiations are efficient, many are opportunistic and should be discouraged and that renegotiations of significant aspects of the PPP are in principle forbidden under EU law. It cites the undesirable characteristics as:

- Competitive bidding may be distorted: the most likely winner is not the most efficient company but the one most skilled in renegotiation;
- With renegotiations carried out bilaterally, the positive effects of competitive pressure are lost;
- Renegotiations often reduce the overall economic benefits of PPP arrangements and might have a negative impact; and
- It may interfere in lender rights to intervene in or prevent changes to the contracts in order to protect their rights.

However, a closer look at EU procurement law and in particular the 2014 Directive[6] on the award of concession contracts is highly illuminating (Article 43 of the Directive is attached as Annexure B.1).

Article 43 explicitly permits the modification of a concession contract in any of the circumstances where the value of the concession[7] is not increased by more than 50% and:

a. The modifications, irrespective of their monetary value, have been provided for in the initial concession documents in clear, precise and unequivocal review clauses and do not alter the overall nature of the concession; or

b. Additional works or services by the original concessionaire are necessary and cannot be provided by a new concessionaire for valid economic and technical reasons and procurement of a new concessionaire would impose "significant inconvenience or substantial duplication of costs" on the Concessioning authority; or

c. The modifications, irrespective of their value, are not substantial.

The term "substantial" is defined as being a point at which the modification "renders the concession materially different in character from the one initially concluded" or where:

- The modification introduces conditions which, had they been part of the initial concession award procedure, would have allowed for the admission of applicants other than those initially selected or for the acceptance of a tender other than that originally accepted or would have attracted additional participants in the concession award procedure;

- The modification changes the economic balance of the concession in favour of the concessionaire in a manner which was not provided for in the initial concession;
- The modification extends the scope of the concession considerably;
- A new concessionaire replaces the one to which the contracting authority or contracting entity had initially awarded the concession in other cases than those provided for.

The enablement to modify the concession contract is also granted in circumstances where the need for modification has been brought about by circumstances that a diligent contracting authority or contracting entity could not foresee and the value is increased by less than 50% and the modification does not alter the overall nature of the concession.

In circumstances where the modification results in an increase in value of less than 10% or where the modification value is below a threshold value of Euro5.186 million (approximately Rs42 crore) the modification may be effected without any further verification or consideration of the directive provided that it does not alter the overall nature of the concession.

Thus, rather than prohibiting amendments to concessions, the EU procurement rules are fairly permissive of such changes on grounds of foreseeability (through the inclusion of enabling contractual terms in the concession), unforeseeability, non-materiality, additionally of service requirements and a change in concessionaire.

Specific jurisdictions are covered in the sections below.

5. Accounting for PPPs

PPP contracts can be used by governments to elude budgetary constraints. Based on the fiscal accounting standard, renegotiation of PPP contracts can be used to avoid funding caps. Governments need to apply prudent fiscal accounting practices as there are a number of ways that government can backload payments to cover large initial investments (Engel, E., 2009). These include extending the duration of the Concession Agreement, raising future user fees, offering additional revenue guarantees, promising increases in future subsidies or lowering the standards of quality. Because PPPs combine financing of construction with the financing of operations, the incumbent government can make convincing promises of future repayments for infrastructure that companies are in the process of constructing. Typically these promises do not enter budgetary processes until the period they are to be disbursed; a practice that can distort forecasts of fiscal outcomes.

PPP expenditure oversight varies from country to country. Some countries insist that PPPs need to pass a social cost-benefit analysis, whilst others insist on a value-for-money test, comparing costs with conventional procurement. Conventionally-procured infrastructure and PPPs have similar information sharing and reporting structures and differences in delegation of authority are insignificant. As far as renegotiation is concerned, the major difference is in the accounting reporting where two fundamental differences can be seen.

- Firstly, where the design, construction, operation and financing occur in one contract in a PPP, the parties must renegotiate all aspects of the contract simultaneously, whereas for conventional infrastructure projects various contracts are amended on an ad hoc basis.

- Secondly, the legal frameworks in many countries impose constraints as mentioned above – value-for-money and social cost-benefit analysis tests that require ex ante approval. These constraints relate to government spending and thus the parties to the contract need to obtain approval upon the renegotiation of the contract in order to obtain larger fiscal commitments.

Engel et al (2007) demonstrated that optimal budgetary accounting of PPPs requires that they appear as a deficit item upfront, independent of whether the source of payments are revenues generated by the project or public budget.

PPPs can also include minimum revenue guarantees, which can be manipulated to avoid spending limits. Engel (2007) has shown that revenue guarantees correspond to subsidies for the concessionaire. Many future obligations can remain hidden due to non-transparent accounting standards. Under accrual accounting, a guarantee is seen as a liability if there is a probability of making a payment and the amount can be calculated. Under cash accounting, guarantees are only apparent when paid. Thus, guarantees are recorded only when called, unless the government makes provision for this and sets funds aside.

It appears that limitations on the scope for renegotiations and the demand for revenue guarantees are negatively correlated. Reducing the scope for renegotiation may prompt the government to offer larger guarantees in order to continue attracting investment from risk-averse sources. From an approval perspective, in addition to seeking a balance between risk of renegotiation and risk of pre-pricing demand risk, infrastructure investment under PPPs should be treated the same way as investments under conventional procurement, i.e. account for all expenditures, current and future, as current spending in the valuation of projects.

6. Financial Restructuring for PPPs

In troubled infrastructure projects, financial restructuring may be a consideration towards ensuring success and sustainability. Traditional tools employed for financial restructuring may include amendment to the finance documents or conversion of debt to equity. These are typically managed within the private-sector side of the PPP Agreement and government involvement is limited to approvals of the changes made in the restructuring especially where there may be change of control provisions that restrict debt holders from acquiring a controlling stake in the equity in PPPs.

Finance document amendments may include extended maturity dates, revised interest rates and amended financial covenants, amongst others. As an example, in the San Joaquin Hills toll road transaction in the United States, USD2.06 billion in toll revenue bonds were restructured by increasing maturity dates, revising coverage ratios (debt service) and reducing annual debt service amounts (Primoff, 2013). Debt restructurings were also implemented for the Dulles Greenway (Virginia) and Southern Connector (South Carolina) projects. Conversion of debt to equity occurred in the South Bay Expressway in California where lenders converted their debt to equity following a 2010 Chapter 11 bankruptcy declaration.

The most direct route to executing a restructuring is a mutually agreed out-of-court amendment of the applicable agreements, or in the case of bonds (in the United States), an exchange offer and consent solicitation. There are a number of challenges, for example, in the US bondholders typically only have recourse to cashflows of the project and not the underlying assets (Primoff, 2013), therefore failure to meet projections is a concern to investors. Consensus amongst parties to the stabilized cashflows is required, which in turn requires an understanding of the challenges inherent in increasing revenues.

7. Risk Considerations

All risks in PPPs need to be identified, allocated and managed. It is imperative that at the earliest stage all parties ensure debt sustainability as part of the risk assessment, as well as quantify the cost associated with bearing such risks. The most suitable risk-sharing mechanism is the one that optimally maximizes benefits and minimizes losses to both parties.

If the appropriate risks are not mitigated by the public sector, the investment and business community may lose confidence in the process and government. This in turn could lead to the government suffering a loss equal to the dollar equivalent of the total value of the economic benefits and public goods delivered by the anticipated project if the private sector decides to withdraw (Bracey, 2013).

It should also be noted that international donors/multilaterals assuming certain of the political or commercial risks does not necessarily guarantee project success or that renegotiations will not be necessary. This was recently seen in the M1 motorway extension in Hungary (Bracey, 2013, PPIAF Case Study, 2009).

M1 – HUNGARY

In this case study of a project renegotiation, considerable over-estimation of traffic demand resulted in the EBRD, as security agent, realizing that the financial case for this project as a private venture no longer existed and strongly encouraging the Ministry of Transport to renegotiate the deal. The Ministry argued that the project was a private undertaking that needed to be resolved privately. It became clear that only under strong pressure would the Ministry eventually agree to support the project for an interim period by issuing a letter of credit (the investors also provided a letter of credit) in July 1997. The renegotiated concession and its consequences are:

- The outstanding debt of the Concessionaire, ELKMA, was transformed into a sovereign debt under more favorable terms and conditions than those of the original debt (which was not guaranteed);
- ELMKA was substituted by a newly established, fully state-owned special purpose company (NyuMA);
- The shareholders of ELMKA lost their participation in equity without compensation; and
- The toll rates were reduced by nearly 50% in August 1999.

Empirical evidence does suggest that economic efficiency concerns should be addressed in the design of toll concessions (Athias, 2007) where uncertainty and renegotiation issues have to be considered. The world has increasingly seen a movement away from the concession model (with a transfer of demand risk) towards the adoption of availability contracts (where the road may be tolled at the discretion of the public authority, but the private party does not take demand risk).

Logic would also suggest that public authorities may end up having to pay more for unanticipated or undesirable changes to performance specifications where the private party does not bear demand risk. The rationale for this is that, under a concession contract, consumers are empowered, i.e. have the ability to contest the private party and its service offerings under consumer protection rights. Similarly, concession contracts can provide greater incentives to apply improvements (adaptive changes) to the private party than availability contracts. Private gains may be achieved by implementing the adaption and thus the private party will implement the change without contractual enforcement by the public authority.

Many investors are prepared to take project risk but very few will take the risk that project contracts such as a Concession Agreement may be invalid or void. Thus the legislative framework for foreign and domestic investment should be such that those who invest in a country's infrastructure do so with reasonable certainty that the complex contractual structure that protects their return on investment and repayment is secure.

Protection to investors can be offered through procedural means, whereby a host country issues a certificate by a competent body stating that relevant procedures for the award or amendments have been complied with and the Concession Agreement has been fully entered into, such as is required in South Africa (Treasury approval under Treasury Regulation 16.8) and Portugal (in the form of an a priori audit under the Tribunal de Contas).

The following of due process and procedures should also serve as reassurance to third-party financiers such as lenders. Third-party financiers need to be able to enforce their rights in terms of a legislative framework authorized and approved by the State. Host countries need to adopt appropriate administrative procedures prior to issuing certificates. These safeguards are considered appropriate where third-party financing is provided and do not therefore assist projects financed only by equity. Equity investors or "sponsors" are more likely than third-party financiers to be able to protect themselves against the risks of fraud or other corrupt practices.

8. Other Considerations

Frequent negotiations are motivated by claims of changing situations over the lifespan of the contract, as well as the long-term and incomplete nature of PPP contracts. However, renegotiations often occur during the construction phase, shortly after the contract award. Guasch (2004) reports an average of 2.2 years between concession award and the first renegotiation.

Due to the medium to long-term nature of PPPs, many jurisdictions allow for a renegotiation clause in the initial agreement. This specifies under what conditions the renegotiations could be initiated, what the process would be and whether or not assistance could be used if agreement cannot be reached. A possible challenge to this approach is that it allows too much flexibility for either party to raise an issue where there is no compelling reason to do so, leading to costly delays and/or contestations.

The choice of contract, whether to be flexible or rigid, depends partly on the country's institutional framework. If the institutional framework is such that the reliability of enforcement is weak, a flexible contract is more likely to be adopted.[8]

Furthermore, the accounting standard to be adopted will influence the renegotiation process. Where government uses private-sector standards, thereby giving leadership to the private-sector accounting regulator, as is the case in Australia and New Zealand (strong sector-neutral accounting), the environment can be inappropriate for reporting on PPPs and thus create perverse incentives for both private and public parties to amend the agreement. In other circumstances, the choice or responsibility is left with the Treasury, as happens in the UK GAAP and IFRS approach (Hodge, G., 2010).

9. Anecdotal Observations in Renegotiations

Various researchers (Engel, 2009 and Bracey, 2013) have made observations on renegotiated contracts:

1. In competitive environments, and in large-scale transport and telecommunication projects, firms purposely submit low offers with the expectation of improving their position later in renegotiations;
2. Scope increases are included in the renegotiation of the contract;
3. Major renegotiations occur shortly after the contract award;
4. A large portion of the costs of renegotiation are avoided by the current administration.

These implications are readily observable in the Chilean PPP program.

It should also be noted that there is a strong correlation between incidence of renegotiation and profitability in various sectors. The table below illustrates the change in average profitability by sector of privatized and concession companies between 1990 and 2002 for Latin American and Caribbean countries.

Table 1: Correlation between renegotiation incidence and profitability – Latin America and Caribbean, 1990 to 2002. (Guasch, 2007)

Sector	IRR (adjusted) (%)*	Initial Cost of Equity (%) #	% Concessions Renegotiated	Average Time to Renegotiation
Telecommunications	21.0	14	1.1%	
Energy	14.5	14	9.7%%	2.1 years
Transport	11.5	13.5	54.7%	2.9 years
Water	11.0	15.5	74.4%	1.3 years
*Note: * IRR adjusted to include management fees*				
# Cost of equity is evaluated at the time of the transaction				

Toll road concessions deserve a special mention. They are normally long-term contracts involving large upfront investments. Traffic forecasts are notoriously imprecise, making toll road concessions very risky. This fact, together with asymmetric information and overly optimistic bidders' proposals on contract value, make toll roads more prone to opportunism and renegotiations (Athias, 2007).

PART 2: COUNTRY COMPARATORS

10. Australia

10.1. Background

Australia's PPP programme has been through several discernible phases in the past 25 years. The first phase from 1987 to the mid-1990s was one of very large projects carried out at state level, such as the Sydney Harbor Tunnel which reached financial close in 1987 and commenced operations in 1992, the M5 Toll Road in 1991 and the M2 Toll Road in 1994. The state of New South Wales was the public sponsor of these early projects acting through its public agency, the Roads and Traffic Authority of New South Wales (RTA).

In the 10 years to 2005, the emphasis shifted to projects in various sectors including schools and hospitals. The lead state was Victoria, which established a team within the state treasury known as Partnerships Victoria that was set up in 2002 based on a state policy framework of 2000.

The third phase from around 2007 has seen the establishment of a national policy framework for PPPs that is consolidated across all states and also broader than PPPs in its approach to infrastructure finance. In addition, a national statutory body, Infrastructure Australia, was established to institutionalize this national framework.

In total, since 1990, some 66,3 Australian dollars (equivalent to around Rs3,8 lakh crore) of capital investment has been made into infrastructure and service PPPs.

10.2. Institutional framework

The formation of Infrastructure Australia (IA) as a statutory body, established under the Infrastructure Australia Act 2008, allowed this centralization of policy and advisory services in a way that still permits state-run projects within a national framework. IA advises governments, investors and infrastructure owners on issues that include Australia's current and future infrastructure needs, mechanisms for financing infrastructure investments, and policy, pricing and regulation and their impacts on investment and on the efficiency of the delivery, operation and use of national infrastructure networks. Infrastructure Australia is responsible for PPP policy and guidelines.

At national government level in Australia, the policy and guidelines apply to all agencies subject to the Financial Management and Accountability Act 1997 (FMA Act) unless a specific government decision advises otherwise (in which case an exemption is required and documented for audit scrutiny).

Each PPP project will be overseen by, and be the responsibility of the relevant portfolio minister of the Australian Government agency undertaking the project. This agency is also responsible for the management and implementation of the project.

The Department of Finance and Deregulation (Finance) is the relevant PPP authority as defined in the national guidelines. Finance has whole-of-government responsibility for advising

Government on the use of PPP arrangements and the value for money of particular proposals, as well as assisting and advising agencies with the preparation and development of PPP proposals as part of the budget process.

PPP projects will be subject to the Gateway review process, a project-assurance methodology involving short, intensive reviews at critical points in the project's lifecycle by a team of reviewers independent of the project. Gateway applies to all major projects undertaken by FMA Act agencies, including via PPPs.

The Auditor-General will have full and complete access as required to information on any Australian Government PPP project.

In addition to meeting the FMA approval requirements that relate to any procurement, there is the obligation to adhere to the approval requirements that apply to PPP projects:

Capital Cost	Approval required
Below $20 million	Agency chief executive
$20 million or more but below $50 million	Minister for Finance and Deregulation
$50 million or more	Full government

In New South Wales the Infrastructure Financing Unit of NSW Treasury is responsible for ensuring that agencies adhere to the processes set out in the NSW Guidelines and the National Guidelines, and is the first point of contact in NSW for PPPs. Treasury assists agencies with commercial/financing advice on PPPs through the preparation of required documents, the Public Sector Comparator (PSC) and participating in the tender and negotiation process. An experienced member of the Infrastructure Financing Unit will also be a member of the steering committee for each project. The level of assistance provided by Treasury will vary according to the procuring agency's level of relevant experience.

10.3. Project pipeline

In NSW there are 31 projects in implementation with a capital value of Aus. Dollar 16.3 billion (Rs0.92 lakh crore). At present there are three large projects in the PPP Pipeline:

- North West Rail Link Operations, Trains and System Project
- Northern Beaches Hospital
- Sydney Light Rail

10.4. Projects history

Australia presents an interesting profile of projects from very large-investment, high-risk projects such as the two tunnels and multiple-interchange freeways, to availability-payment-type schools and hospitals. In an interview with a former senior official in the NSW Treasury, he stated that every single project had some form of stress or distress. These range from projects where the concessionaire went into liquidation such as the Sydney Cross City Tunnel (this has happened twice and as a result of lower-than-required revenue from tolls) and the Lane Cove Tunnel, which was sold after the concessionaire was placed in receivership in 2010, to hospitals and roads where the government actively manages a variation/amendment process to change specifications.

He stressed that there is no formal renegotiation or "bail-out" process in the Concession Agreements as this would, in his view, distort the market bidding process. In 2010 the then-Roads Minister David Campbell for NSW said of the Lane Cove Tunnel sale, *"let's be clear, with none of these projects has the government legislated and demanded that a particular business invest. With all of these projects, the best minds of the private sector put together their business model, and they make investment based on their business model, their research. They didn't make their investment decision based solely on information provided by the government."*

The ex-NSW official recalled that the bidding for the sale of the concession had been very competitive in 2010 with some 20 bidders participating. There was no change in the government risk profile and the restructuring and sale was managed by the lenders in terms of their step-in rights. The loss to equity participants was absolute, while the lenders may have minimized their loss through restructuring their loans.

Other examples he cited were the Melbourne Southern Cross Rail Station where the state government of Victoria reached an out-of-court settlement with the Concessionaire for a 15-month delay in completion. This was done under the dispute resolution procedures in the Concession Agreement. The public agency (the Southern Cross Station Authority or SCSA), in response to the claims received from the developer, took steps to determine the potential exposure to risk and minimize the cost of settlement, including:

- Engaging independent experts to assess the potential legal, commercial and financial risk exposures associated with the claims;
- Establishing an interdepartmental committee to oversee negotiations with the developer and Concessionaire. The committee comprised representatives of the SCSA and the state treasury, the Department of Premier and Cabinet (DPC) and Department of Infrastructure;
- Setting up a senior strategy committee to investigate the veracity of the claims and make recommendations to the interdepartmental committee. The senior strategy committee comprised representatives from the SCSA, DOI and independent expert advisors; and
- Appointing a high-level negotiating team to conduct negotiations.

The state government required certain settlement terms and set maximum contributions to be made by the state. All stakeholders in government were kept informed on the progress of negotiations and ensured that negotiations were conducted within the set parameters.

Prior to finalizing the agreement, the SCSA appointed an independent commercial mediator to assess the proposed settlement and certify whether:

- The process to negotiate a settlement was properly informed and rigorous; and
- The analysis of the proposed settlement and the amount to be contributed by the state was consistent with the SCSA's assessment of the state's potential commercial and legal risk, and adequately addressed that risk.

The SCSA engaged a Queen's Counsel (QC) experienced in the construction industry and dispute resolution to provide certification on the settlement. The QC concluded that: *"The settlement agreement was the best possible commercial settlement that was able to be negotiated following a lengthy and vigorous process of commercial negotiations."*

The state auditor general then undertook an audit on, amongst others, whether the global settlement agreement was consistent with the desired allocation of risks.

In summary of points made by the ex-official on renegotiation:

- The ability to manage the changing environment and emerging risks through an ability to amend and adapt contracts has been key to de-stressing projects. This in turn has prevented any single project stress from causing a market perception of increased risk. On the whole, the renegotiation outcomes have been beneficial and demonstrated government commitment to managing the PPPs in a manner that is in the public interest.
- The Australian PPP agreements do not contemplate renegotiation on specific triggers but cater for changes in a variety of ways:
  - Variations to specification or scope by government and specification by the concessionaire;
  - Dynamic and empowered committees to apply specifications in a manner that drives efficiency in public facilities such as hospitals;
  - Dispute resolution procedures permit mediation and facilitated agreements; and
  - Amendments are permitted and subject to the same oversight as the original approvals and gateways.
- Strong oversight and governance at state level is essential, where necessary empowered committees are established.
- A form of PPP Unit closely represented on the project steering committee strengthens oversight and provides information to decision makers.
- The state governments have sent a strong message to the market that they will not guarantee any private sector debt and will not bail out projects.
- The market works. The projects do not go under, the concessionaire is liquidated and equity is sold into a secondary market in a process led by lenders.

In NSW, the treasury accountability is enhanced by the capability and resources of an Infrastructure Finance Unit that is represented on all projects. Through the unit, the treasury has responsibility for:

- Supporting and reviewing the contract management of Partnerships Victoria projects, including assisting in risk mitigation and dispute resolution;
- Facilitating the sharing of contract management knowledge, including through conducting forums for contract managers to share lessons learned and network with their peers;
- Establishing and implementing an appropriately credentialed and professional standard training programme for public sector contract directors/managers; and

- Monitoring and independently advising the Treasurer and Cabinet on significant contract management issues.

10.5. Disclosure framework

In NSW and all other states a contract summary of each PPP must be disclosed to parliament. The procuring agency must ensure that a contract summary is made available to the auditor-general for audit within 45 days of the contract becoming effective. Within 90 days of receipt by the auditor-general, the audited contract summary must be tabled in parliament by the responsible minister.

Any amendment to the contract that changes information contained in the previously published contract summary will need to undergo the same public disclosure requirements.

10.6. Renegotiation and amendment framework

In the Infrastructure Australia National PPP Guidelines the underlying assumption is that the original form of contract is based on a feasibility study and business case that demonstrates optimal risk transfer, management synergies, encouraging innovation, efficient asset utilization and integrated whole-of-life asset management.[9] Any change to the agreement must thus be approved on the same basis as the ex-ante approval. The term "material" is not defined in the National Guidelines.

National Guidelines

In addition to the various approvals prior to contract signature, additional approvals are required in certain situations such as:

- Where there is a material change to the project including an amendment to the key project objectives, scope of services or where the conclusions or major assumptions of the business case (including the economic and financial appraisals) change significantly;
- If there is any material change in the risk allocation from that which was last approved by government;
- If an amendment to the budget funding is required; and
- Where issues relating to the public interest arise.

Furthermore, if the procuring agency wishes to renegotiate any area of a PPP contract after it has been approved and signed by government, the agency must obtain approval prior to commencing renegotiations from the relevant PPP authority.[10] Renegotiation of any significant areas of a PPP contract after it has been approved and signed by government will require the agency to obtain cabinet approval prior to commencing negotiations.

NSW Requirements

In cases where the agency wishes to renegotiate or amend any element of a previously-signed PPP, the agency is required to consult with NSW Treasury prior to commencing negotiations. Treasury will determine whether it would be appropriate to seek the approval of the treasurer or cabinet.[11]

A senior official responsible for PPPs in NSW said the following:

"One of the problems with PPP contracts, is that they only deal with the situation/problem/issue that they were initially set up for. The contract can assume that a range of other events or contingencies may occur and prescribe paths that are to be followed if they do occur, but no person has the capacity to foresee everything that may occur. Additionally interpretation of what is meant in a contract can vary widely among readers, even though the contract drafter thought that there was no room for ambiguity. Also performance by each side of their obligations to a contract is often less than the willing compliance by each side assumed in the contract. Often, however, the lawyers handle this by stating in the contract that only certain terms are essential elements and only breach of these would lead to termination.

Problems often occur in contracts that I have knowledge of and in the absence of a clearly specified treatment in the contract, the way they are handled is something like this:

1. *Good knowledge is needed of the negotiating strengths each side has in the contract, and in other issues in the relationship between the parties.*

2. *The parties to the contract may have a reasonable and honest understanding of how the current problem has been arrived at, are able to discuss the situation in a non-emotional way, and have a desire to continue the relationship because it is giving benefits to each (Situation A) – or the parties are strongly arguing, shouting and blaming each other and making threats about what they will do to each other (Situation B)*

3. *An amendment to the contract drafted by lawyers will be the solution in each case, but getting to that amendment will be done differently in situations A or B.*

4. *In situation A, given that the contract sides are being honest and reasonable with each other, commercial meetings should be held to scope out a way to go forward. Point number 1 is very important and the Government negotiator must be a strong and experienced negotiator.*

5. *In situation B, the end solution will also be a negotiated amendment to the contract, but preferably a means will be found to be able to discuss the situation calmly.*

6. *Usually a solution will be negotiated between the parties – as it takes a very long and expensive time to 'solve' a commercial dispute through the courts."*

10.7. Refinancing Framework

The National Guidelines require that all re-financings require consent by the national Cabinet. In NSW the treasury is also required to provide consent for any re-financings. Re-financing gains are normally shared between government and the private party on a 50:50 basis provided the projected equity return at the time of the re-financing (taking into account any refinancing) is above that reflected in the original base case financial model. In NSW, any proposed re-financing should not result in a debt balance, at any time between the date of the refinancing and the end of the concession, greater than the projected debt balances in the original base case financial model.

In this way the project is protected from an additional amount of debt that amounts to a re-gearing.

10.8. Contract Management

In NSW, after contract signing, management of the PPP is transferred to an implementation team in the public contracting agency to manage the execution and implementation of the contract. The contract management is overseen by the project steering committee and/or Infrastructure NSW for the implementation of the project during the initial delivery phase (i.e. during construction and at least the first two years of operations). In NSW, the cabinet may also require regular progress reports for major projects so that it can monitor implementation.

10.9. Project Examples

10.9.1. Cross City Tunnel

The Cross City Tunnel PPP is the financing, design, construction, operation and maintenance of two east–west toll road tunnels under the Sydney Central Business District. The project has been funded, designed and built by the private sector, at an estimated development, design, construction, fit out and commissioning cost of more than $700 million. The tunnel components of the project must be operated, maintained and repaired by the private sector participants until 18 December 2035 or any earlier termination of the project's main contracts, and will then be handed over to the public sector.

The tunnel opened for traffic in August 2005 (two months ahead of schedule). The traffic forecasts were around 86,000-87,000 vpd in 2006 but actual traffic in that year was around 30,000 vpd.

10.9.1.1. Changes

On 23 December 2004, the RTA and the principal CrossCity Motorway consortium parties to the project's contracts executed an amendment contract under which the CrossCity Motorway parties undertook to fund up to $35 million of changes to the project's works directed by the RTA, in return for specified increases in the maximum permissible tolls on tunnel users.

On 27 December 2006, receivers and managers were appointed to the CrossCity Motorway parties to the project's main contracts. Following a competitive tender process, ownership of the principal private sector parties to the project contracts was subsequently transferred from the CrossCity Motorway consortium to a new consortium formed by ABN AMRO and Leighton Contractors, under sale contracts that were executed on 19 June 2007 and completed on 27 September 2007.

On 27 September 2007, the RTA formally consented to this sale, plus an associated refinancing of the project and an associated change in the project's operation and maintenance contractor, by executing a consent deed. The RTA also executed a series of other agreements, with parties from the old and new consortia, to make consequential minor amendments to five of the project contracts to which the RTA was and is a party. These agreements all took effect immediately.

10.9.1.2. Triggers

There were two distinct changes. The first was for additional scope changes and the concessionaire carried out $35 million of work on these changes for the RTA. The RTA compensated CCM by allowing an increase of 15 cents in the base toll of $2.50 (1999 prices). This trigger was thus an authority scope change.

The second change was the sale of the concession, which was done by the receivers appointed by the financiers. This was triggered by the insolvency of the concessionaire.

10.9.1.3. Process

The first change was a negotiated scope change done in the context of the Concession Agreements where RTA could require a change provided that the change would not adversely affect the use, patronage or capacity of the Cross City Tunnel or the ability to levy or collect tolls, and the change would not cause the company to breach any agreement with a third party.

Within 25 business days of receiving a change order from the RTA, the trustee or the company (as relevant) had to give the RTA detailed estimates of the likely costs and the implications of the proposed change for the functional integrity of the works, performance standards, quality standards, the date of completion of the works and any other obligations adversely affected by the change.

The RTA then had 15 business days to advise the trustee or the company whether it wished to proceed with the proposed change. If it decided to proceed, and the RTA agreed with the costings and advice of the trustee or the company, the RTA could notify the trustee or the company and the change would be effected. The parties agreed to the costs and the method of payment was by increasing the toll.

The second change was one initiated as a lender step-in on the concessionaire being placed in receivership. The concession was sold in competitive bidding.

Receivers and managers were appointed in December 2006 and in the competitive tender for sale, eight bids were received and five parties were shortlisted. The concession was sold to ABN AMRO (RBS) / Leighton Contractors for $695 million in September 2007. The new business and finance model was based on downward revision of traffic forecasts taking into account actual traffic flows.

The sale was effected through a sale of shares and units.

10.9.1.4. Approvals

The scope change was authorized by the RTA itself but there was not proper disclosure to the parliament.

The RTA and treasury's role in the sale was to observe and undertake the due diligence of the proposed owners. The RTA and the treasurer needed to approve the amendment deed, which effected the sale.

A subsequent requirement was for government approval if the conclusions/assumptions of the business case change significantly due to development approval conditions, changes in costs or revenues or changes in user charges and a decision was taken extending the life of the steering committee to the initial delivery phase of all PPPs and requiring government approval prior to commencing renegotiations on any signed PPP contract.

10.9.1.5. Outcomes

Under the sale, the concession agreement stayed in place and there was no change in risk allocation or in pricing formula. All private sector obligations were transferred to the new owners of Cross City Motorway.

In a subsequent event in 2013, Cross City Motorway was placed in voluntary administration in 2013 after failing to refinance a $70 million debt. The refinancing was apparently hampered by a state action to recover $64 million in stamp duty. It appears that another private sector company, Transurban, has offered to acquire $475 million of head debt (at a discount of 21% on the actual $600 million owed by principal investor RBS), plus a further $27 million dependent on traffic volumes. This values the asset at just $500 million - half of its original construction cost. It is not known if the offer was accepted.

10.9.1.6. Auditor general report

The NSW auditor general examined the scope change and concluded that it was correctly handled procedurally and that it was valued appropriately but queried whether imposing the costs as an additional toll was appropriate.

The sale of the concession was not audited.

10.9.2. Lane Cove Tunnel

The Lane Cove Tunnel (LCT) is a 3.6-kilometre tunnel. It links the Gore Hill Freeway with the M2 Motorway providing a key link in the Sydney Toll Road Network. After the public consultation period on the EIA (in March 2002), the RTA invited the private sector to register their interest in financing, designing, constructing, operating and maintaining the LCT project. Four consortia (The Lane Cove Tunnel Consortium, Lane Cove Motorway, Lane Cove Expressway and TunnelLink) registered an interest in the project and were supplied with the full Request for Proposals (RFP) in July 2002.

Award was on the basis of value for money for the community which, due to tight design criteria limiting differentiation on costs, was highly dependent on revenue forecasts. Revenue in turn depended on traffic forecasts. Thus the bid with the highest traffic forecasts, with revenues that allowed an upfront payment rather than requiring a government contribution, was selected.

The capital cost of the Lane Cove Tunnel and E-ramps project was estimated at over $1.6 billion, which was financed with $0.54 billion equity and $1.14 billion in debt of various maturities. The firms with initial equity stakes included ABN AMRO, Thiess, John Holland, Transfield Holdings, AMP, Westscheme and Motor Trades Association of Australia Superannuation Fund. Debt was held by private bond holders with protection against losses via a monoline insurer.

10.9.2.1. Changes

While the tunnel and ramps were successfully completed and opened to traffic in 2007, traffic was much lower than predicted (in 2009 there was 50,000 AADT vs a forecast of 120,000). Cash flow problems due to high operating costs occurred when revenue was low.

The 2008-2009 global financial crisis occurred in the period when the road might have been expected to recover from low opening figures. Gross State Product growth stalled. Suburbs at either end of the tunnel, with significant numbers of businesses in the financial services sector, were particularly affected. Employment reduction led to commuter and business trip reductions. Planned office and residential developments, which would have brought more people to tollway catchment, did not go ahead. Connector Motorways went into a receivership in January 2010 after experiencing a string of losses. An administrator, PPB, and a receiver, Korda Mentha, were appointed in January 2010. Korda Mentha appointed Goldman Sachs to run a competitive process to sell Connector Motorways.

Connector Motorways was sold to Transurban in May 2010 for $630.5 million. Transurban financed the acquisition with $372.5 million of equity and $258 million of debt.

Transurban is currently operating until concession expires in 2037. It cited that "*it worked to maximize the 'Day 1' EBITDA margin on the Lane Cove Tunnel, primarily by eliminating costs*".

10.9.2.2. Triggers

The trigger for the change was the concessionaire passing into receivership.

10.9.2.3. Process

The security trustee stepped in under the Concession Agreement and exercised its rights to "assign, novate or otherwise dispose of any or all of the rights and obligations of the Trustee and/or the Company under the agreements, or permitting a receiver to do so".

10.9.2.4. Approvals

The RTA had to grant the security trustee all necessary access to the relevant sites or land and give the security trustee all relevant information in its possession.

The security trustee had to obtain the RTA's consent before transferring or otherwise disposing of the rights and obligations of the concessionaire under the project contracts, or disposing of all the shares in the concession company.

10.9.2.5. Outcomes

Equity was written off completely. MBIA as guarantor of the bonds was faced with the major loss associated with the debt and had sought to offset the cost of the debt write-down by buying bonds in the secondary market at a significant discount to face value, and so a large part of the debt write-down was passed to original bondholders. MBIA had suffered a credit downgrade after the global financial crisis. Lane Cove Tunnel's Moody's bond rating had fallen from Baa1 to B3.

The NSW government did not pay any compensation as a result of the failure. Transurban acquired the assets of Connector Motorway, including its rights under the Concession Deed. The terms of the Concession Deed were largely unchanged but there would have been an issue in terms of the resetting of the project financial model given the potential carve-out of refinancing gains and upside revenue sharing.

This was a private-party solution whereby a bankrupt concession company was sold in an open competition where the bidding was on the value of the concession going forward. The bidding value of $630 million was less than the estimated value of equity and debt of $1,6billion. These losses would have wiped out the equity of $540 million and part of the $1,14 billion debt. It is not known to what extent the monoline insurance covered these losses.

In 2013, Transurban announced that it had successfully refinanced $260 million of debt that was due to mature in August 2013. It disclosed that it had an EBITDA of $35,4 million.

10.9.2.6. Auditor general report

There was no audit of the changes. However, Infrastructure Australia commissioned a study on improvements in toll revenue forecasting.

10.9.3. Southern Cross Rail Station

In July 2002, the Southern Cross Station Authority (SCSA) entered into a services and development agreement (SDA) with a private consortium (Civic Nexus Pty Ltd) under a public private partnership (PPP) for the redevelopment of the station. Under the SDA, Civic Nexus Pty Ltd (the concessionaire) was to redevelop the station and, upon completion, manage the operations of the station for 30 years.

Construction of the station was contracted to be complete on 27 April 2005. By late 2004, the developer had publicly announced a forecast loss on the project of $122.6 million and was beginning to make some significant compensation claims, primarily against the state and to a lesser extent against the concessionaire.

The SCSA undertook a lengthy negotiation process with the concessionaire and the developer to settle the claims. On 31 July 2006, a global settlement agreement was finalized and the principal construction works were completed.

On 1 August 2006, the concessionaire took over management of the station precinct operations.

10.9.3.1. Changes

Under the original SDA signed in 2002, the state was not required to make any payment to the concessionaire until completion of construction and handover of operations. At this point, the 30-year concession period would begin and the SCSA would commence quarterly core service payments (CSPs) to the concessionaire. The concessionaire subcontracted the design and construction of the station to a developer (Leightons Contractors). Delays were encountered by the developer and the agreed construction milestones were not met. This resulted in a global settlement agreement worth $32.25 million between the state, the concessionaire and the developer.

The final global settlement agreement between the state and the private parties dealt with the 15-month delay in the project and, while there were some costs incurred by the state in the settlement, the benefits outweighed the potential costs.

The agreement resulted in some risks being allocated to the state that were not consistent with the desired risk allocation, namely:

- Payment of $8.5 million for settlement of non-contractual claims by the developer for which it did not admit liability;
- Relieving the concessionaire from paying damages for not meeting construction milestones; and
- Provision of a $20 million non-cash benefit to the concessionaire resulting from the SCSA agreeing to pay the capital core service payment component backdated from the original scheduled completion date, rather than from the date works were actually completed.

However, these measures were considered necessary to settle the developer's claims and ensure that the additional costs to the state were minimized. In addition, at least some of the delays encountered by the developer were, in part, a result of site contamination (for which the SCSA was liable) and some state-initiated modifications.

10.9.3.2. Triggers

The trigger was the lodging of a dispute under the Concession Agreement dispute resolution procedures. This permits *"that senior representatives of the parties must meet and use their reasonable endeavors, acting in good faith, to resolve the dispute by joint discussions"*.

10.9.3.3. Process

The global settlement agreement was negotiated to minimize adverse impacts on the state's original cost expectations for the redevelopment. This was achieved by:

- A rigorous and structured negotiation process overseen by an interdepartmental committee;
- Use of independent experts to assist in legal, commercial and financial risk assessments to determine the state's actual liability and potential risk exposure, persuading the concessionaire to contribute a fair and significant cash payment to the settlement;
- Avoiding lengthy litigation and legal costs estimated by the SCSA's legal advisers to potentially exceed $200 million; and
- Appointing a high-level negotiating team to conduct negotiations.

10.9.3.4. Approvals

Government was kept informed on the progress of negotiations and ensured that negotiations were conducted within the set parameters.

Prior to finalizing the agreement, the SCSA appointed an independent commercial mediator to assess the proposed settlement and certify whether:

- The process to negotiate a settlement was properly informed and rigorous; and
- The analysis of the proposed settlement and the amount to be contributed by the state was consistent with the SCSA's assessment of the state's potential commercial and legal risk, and adequately addressed that risk.

The SCSA engaged a Queen's Counsel (QC) experienced in the construction industry and dispute resolution to provide certification on the settlement. The QC concluded that: "*The settlement agreement was the best possible commercial settlement that was able to be negotiated following a lengthy and vigorous process of commercial negotiations.*"

10.9.3.5. Outcomes

There was an agreement to extend the practical completion date for principal works by 15 months from April 2005 to the end of July 2006 and relieve the concessionaire and the developer of their obligation to pay liquidated damages for not meeting the original scheduled completion dates.

Under the terms of the global settlement, the concession period (originally scheduled to be the 30-year period commencing 27 April 2005) was effectively split into two concession periods:

- The 30-year operating concession period that commenced upon handover of operations to the concessionaire on 1 August 2006 was 15 months later than agreed in the original SDA.
- The 30-year capital concession period remained the original 30-year planned period commencing 27 April 2005.

As a result of this decision, the SCSA then owed (and paid) the concessionaire the capital payments owing from 27 April 2005 in a $30 million lump sum upon settlement.

10.9.3.6. Auditor general report

The settlement was audited by the auditor general.

10.9.4. Reliance Rail

The Rolling Stock Public Private Partnership (PPP) was established between NSW RailCorp and Reliance Rail in December 2006 to finance, design, manufacture, commission and maintain 78 car trains.

The Reliance Rail consortium comprises equity partners Downer EDI, AMP Capital Investors, RBS Social Infrastructure (Australia) Trust (formerly ABN AMRO), and International Public Partnerships (formerly Babcock and Brown Partnerships). Reliance Rail is supported by a team of industry specialists, including engineering and service organizations such as Downer EDI Rail and Hitachi.

The Downer EDI Rail-Hitachi Joint Venture is responsible for the design and manufacture of the trains on behalf of Reliance Rail. Downer EDI Rail is also responsible for the design, construction and maintenance of the new Auburn Maintenance Centre on behalf of Reliance Rail. Downer EDI Rail will also maintain the trains and the center for the contract term of 30 years.

Upon delivery of the 78 trains (including six spares), Reliance Rail is contracted to make available up to 72 trains per day to the Sydney Trains network. The company receives payments based on performance against targets for safety, passenger amenity and reliability.

10.9.4.1. Changes

The venture was very highly geared with some $2,2 billion of debt and only $137 million of equity. The debt was largely in the form of bonds wrapped by two monoline insurers. The insurers were liquidated in the global financial crisis and the bonds were reduced to junk status. When the time came to draw down on a senior debt facility provided by a consortium of international banks, the lenders refused under a provision of the loan documents forcing the concession company into a funding crisis when only seven trains had been delivered. This opt out also reflected the underlying mispricing of the debt at pre-financial crisis levels relative to those post-crisis.

The NSW government agreed to provide $175 million deferred equity in order to prevent a default of the concession company under its financing agreements. Rather than guarantee the full amount of senior debt ($357million) or provide state funding, the state government offered the deferred equity to be callable in six years conditional on delivery of the trains and the provision of the full amount of senior debt. At the time that the equity is payable it is expected that the annuity payments will be providing a revenue stream such that the concession company can refinance the project and not call on the state equity.

The deferred equity is in return for a call option on the entire equity of the concession company.

10.9.4.2. Triggers

The trigger was failure of the monoline insurers leading to a refused drawdown by the senior debt lenders.

10.9.4.3. Process

The financing terms of the concession agreement were amended in negotiations between NSW Treasury, NSW RailCorp, the concession company shareholders and the lenders.

10.9.4.4. Approvals

The renegotiation was approved by the state treasury.

10.9.4.5. Outcomes

The NSW government cited the renegotiations as a major success given that a collapse of the contract would have meant that the people of NSW would have been waiting up to seven years for replacement trains. It said that the restructuring agreement provided all involved parties with the confidence to fulfill their contractual obligations without major exposure of the state balance sheet. By the end of 2013, 51 of the 78 air-conditioned trains were in service.

10.9.4.6. Auditor general report

There is no record of an audit by the auditor general.

10.9.5. M7 Motorway

The M7 Motorway is a 40-kilometre dual carriageway motorway in Sydney developed as a PPP with the RTA as the public authority. West Link Motorway Limited is the concessionaire. Major construction started on the M7 Motorway in July 2003.

The project was opened to traffic in December 2005, eight months ahead of schedule.

The federal government contributed $360 million towards this motorway with the remainder of the estimated $1.54 billion capital cost being met by the private sector.

10.9.5.1. Changes

A number of change orders were utilized by the RTA to make changes to the design and construction of the project in accordance with relevant provisions in the project deed.

The RTA may change the works to be designed and constructed by the concessionaire provided the change will not adversely affect the use, patronage or capacity of the M7 Motorway or the concessionaire's ability to levy or collect tolls.

Changes to the scope of works may also be proposed by the concessionaire provided that they will not adversely affect the functional integrity of the works, performance standards, quality standards, the date of completion of the works or any of their other obligations to the RTA.

The costs of changes are calculated based on the additional operational-phase costs reasonably arising from the change, including financing and delay costs, losses of revenue and reasonable amounts associated with overheads and profits. If a change directed by the RTA decreases the scope of works or reduces the costs of the works, then the RTA is entitled to receive 75% of the cost savings reasonably arising from the change, including any acceleration savings and reductions in financing costs.

If a change in the scope of work by the concessionaire and agreed to by the RTA results in construction-phase and/or operational-phase cost savings, the RTA is entitled to receive 50% of the cost savings.

Payments are made in the month in which the relevant work was undertaken or when the omitted work would have been done.

If the project's planning approval is modified in this or any other way or a new planning approval is issued – and this necessitates a change to the works – then the change must be addressed as if the RTA had directed the change by issuing a change order under the arrangements described above.

10.9.5.2. Triggers

Scope changes may be requested by the RTA or the concessionaire.

Renegotiation is also triggered and the agreement expressly envisages a range of circumstances under which the project's contracts and/or other changes might need to be renegotiated.

These include:

- The project's planning approval is modified or a new planning approval is issued;
- Any of a specified series of traffic connections to the motorway are closed or materially reduced, except during special events, emergencies or road maintenance or repair works or if there is a material threat to public health or safety;
- A competing road project is completed and opened to traffic during the motorway's operating term;
- The RTA or the NSW government introduces new public transport services along the public transport corridor;
- Discriminatory change in state law occurs; or
- An uninsurable event occurs;

and this event or circumstance has had, or is starting to have, a material adverse effect on:

- The ability of the concessionaire to repay its debt financiers substantially in accordance with the project's debt financing arrangements; or
- The nominal after-tax returns of notional initial equity investors.

10.9.5.3. Process

The process followed is clearly detailed in the agreements.

A detailed process for such changes and the details required (such as detailed estimates of the likely costs, details on the implications of the proposed change for the functional integrity of the works, performance standards, quality standards, the date of completion of the works) is set out in the agreements. Disagreements are settled under dispute resolution procedures.

Any renegotiation is aimed at:

- Enabling the borrower to repay the project's debt financiers in accordance with the project's debt financing arrangements, with principal payment levels not exceeding those envisaged in the base case financial model; and
- Enabling the concessionaire to give the project's equity investors the lower of:
  - The after-tax equity return they would have received had the event or circumstance not occurred; and
  - The after-tax equity return they were originally predicted to receive in the base case financial model.

10.9.5.4. Approvals

The project has a steering committee and approval of the state treasury for any renegotiation would be required. Scope changes are approved within the RTA.

10.9.5.5. Outcomes

An Infrastructure Partnerships Australia Case Study had this to say on the project:

"The road has been comprehensively hailed by all stakeholders as a great achievement that delivers significant benefits to the community. The Australian, NSW and local governments have all praised the contribution that Westlink M7 has made to improving transport across and through Sydney. Business leaders have applauded Westlink M7 as a significant driver of investment and employment growth in Sydney. Media attention has also been overwhelmingly positive."

10.9.5.6. Auditor general report

There is no record of an audit by the auditor general.

11. South African PPP Program

11.1. Background

The South African PPP Framework has borrowed heavily from practice and experience in the United Kingdom (UK) where a form of contracting known as the Private Finance Initiative (PFI) was a common source of the social and economic infrastructure developed in the 1990s in the UK.

This form of contracting consists of the public sector, through a public agent, granting the rights to design, build, finance and operate for a specified period of time some publicly-owned infrastructure to a private party with substantial risk transfer to the private party. Because this form of contracting was known to impose significant financial obligations and forms of risk on the sovereign fiscus, responsibility for approval of projects implemented under such contracts was given to Her Majesty's Treasury (UK Treasury).

The South African framework for PPPs dates back to 1999 when the national Government approved a framework for PPPs in terms of which the Minister of Finance and the Treasury would be responsible for the oversight and fiscal management of PPPs. As a result, Treasury Regulations (TRs) were subsequently made and promulgated in terms of section 76 of the Public Finance Management Act, Act No 1 of 1999 (PFMA). Regulation 16 (TR 16) of the TRs falls under Part 6 thereof – which Part is captioned "Frameworks" – and is pivotal to the regulation of PPPs in the South African context. The TRs have been revised and reissued a number of times, but TR 16 has remained substantially the same since the first version of the TRs was made early in the second quarter of 2001 and it has not changed at all since the revised TRs were made in March 2005.

TR 16 sets out a formal process by which an institution must obtain various approvals from the relevant treasury for any project that meets the definition of a PPP. TR 16 also provides for the requirements that have to be met for, among other things, a given project to be classified as a PPP and therefore to bring it within the ambit of TR 16 and for the various treasury approvals that need to be granted to authorize the implementation thereof.

Pioneering PPP projects were undertaken between 1997 and 2000 by the SA National Roads Agency for the N3 and N4 toll roads; by the Departments of Public Works and Correctional Services for two maximum security prisons; by two municipalities for water services; and by SA National Parks for tourism concessions.

11.2. Institutional Framework

South Africa has an elaborate and robust PPP legislative and regulatory framework. Since 2000, only three PPPs on average per year are executed. The reason for this is the time it takes to conclude a PPP successfully, which is usually 24 to 36 months from pre-qualification to financial close. No projects have been terminated after financial close.

The legislative and policy framework for PPPs are described in the following:

- The Republic of South Africa Constitution Act, 1996;

- The Public Finance Management Act 1 of 1999 and Regulations issued in terms of the Act;
- Treasury Regulation 16;
- The National Treasury Regulation Practice Note on PPP; and
- The PPP Standardized terms of PPP Agreement ("Standardization")

The public procurement process overarching principles are contained in section 217 of the Constitution, which states that "*when an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost-effective*". The PPP framework embraces these principles.

At national and provincial level, legislation governing PPPs is contained in the PFMA and Treasury Regulation 16. These sections require the accounting authority to have an appropriate procurement and provisioning system in line with the constitutional principles that is fair, equitable, transparent, competitive and cost-effective.

Treasury Regulation 16 prescribes that all PPPs conform to the requirements of affordability, value for money and adequate risk transfer from Government to the private party.

The PPP unit provides technical assistance to Government in establishing, managing and monitoring PPPs. It resides within the National Treasury and provides (under the relevant delegation of the Minister of Finance) or facilitates the necessary approvals at each phase of the PPP procurement process. The national unit consists of 17 full-time professionals.

The sponsoring ministry/entity needs to submit a feasibility study to the unit for approvals at all stages. The business case for approvals must demonstrate:

- Value for money;
- Appropriate risk transfer;
- Innovative, efficient and timeous service delivery;
- Access to private capital; and
- Improved service delivery of efficient government administration.

11.3. Project Pipeline

The Project Pipeline in South Africa includes many projects in feasibility study stage. Significant toll road concessions in the country are, however, in limbo as legal actions based on strong public opposition to tolling find their way through the courts. The sector performing best is the Independent Power Producer programme where procurement of base load and renewable IPPs is scheduled for 2014 and 2015. This is in response to a major energy generation crisis after the state utility Eskom failed to adequately plan and procure power stations in the 2000s.

11.4. Projects History

The South African government has concluded over 30 PPPs and 64 IPPs to date. The PPPs vary across all sectors and sizes from some USD30 million to USD3 billion. In the roads sector, the South African National Roads Agency Limited (SANRAL) has concessioned 1,288km of its 19,700km-wide road network under long-term PPP-type concessions for the design, build, finance and operation of the roads before their transfer back to SANRAL.

This is in addition to 1,832km of the tolled road network managed by SANRAL with maintenance and/or toll collection carried out on behalf of SANRAL by private sector companies.

In the primary concessions, the first of which was signed in 1998, the operational and traffic demand risk is passed entirely to the private party who, in turn, allocates risk between the concession company, its shareholders and lenders and the operating companies. These concessions are widely considered to reflect world good practice in concessions.

In addition to SANRAL' s road concessions, the Western Cape Provincial Government entered into a 25-year concession for the design, building, financing and operation of the Chapman's Peak Toll Road in Cape Town in 2003. Chapman's Peak Drive is a scenic, mountainside road with tourist and commuter traffic. It is considered to be one of the most technically challenging roads in South Africa to build and operate given the high risk of rock and mud slides. Although based on the same form of agreement as developed by SANRAL, the Chapman's Peak Toll Road Concession Agreement contains a minimum revenue guarantee as well as a regime by which the concessionaire is granted relief in the case of external events. This reflects the different risk profile of the road. The private companies in the Chapman's Peak concession are South African companies with involvement in and complete familiarity with the SANRAL concessions.

Many of the PPPs have had some form of variation or amendment. Most of these are not material (see below for definition of this term) and are governed within the standard terms for variations. These mostly relate to specification changes and are paid for by a once-off capital payment or, where additional capital has been raised by the private party, by an increase in the annuity payment. Generally, where there is a user-pays element (toll roads primarily) there is a once-off capital contribution to prevent changes to the toll tariff that prevents uncertainty on cost recovery.

To date no projects have been terminated. A breach notice has been issued on one project that was remedied by the concessionaire upon threat of step-in by the lenders.

A variety of material amendments have been approved by the National Treasury in projects, primarily the beneficial refinancing of three national toll roads, the Gautrain commencement of partial operations in 2010 in settlement of a dispute on achievement of operational commencement and the substantial reorganization of the Chapman's Peak Toll Road. In each case the approval was given by the National Treasury.

The project with significant disputes related to the pre-operation phase and claims from the construction sub-contractor to the concessionaire and on to the Province of Gauteng is the Gautrain Rapid Rail link. This PPP has a significant government capital contribution of around 87% of capital value and is an outlier in terms of its size and complexity. Lessons learned are that a very robust dispute resolution procedure must be in place and used rather than any attempt at a negotiated settlement where the difference between the public and private views on amounts in dispute is too great (in contradistinction with the Melbourne Southern Cross Rail Station where a settlement agreement was justified in terms of avoided dispute costs).

In 2011 the Renewable Energy Independent Power Producer Program commenced. This programme is modeled on the PPP framework but differs in risk profile. Because the government, through the power utility Eskom, is buying a commodity and is not interested in an asset, there is no scope for the amendment of tariff or payment of any amount by government on termination for IPP default. The National Treasury effectively provided a sovereign guarantee of payment to the IPPs by requiring the Department of Energy to make good on these payments in the event of an Eskom default. The Direct Agreements with lenders provided step-in rights for lenders in the event of default. The agreements are non-negotiable contracts and were developed after an extensive review of global best practices and consultations with numerous public and private sector actors.

All the variations and amendments have contributed to the stability of the overall program, and relieved project stresses in a rational and objective manner. At a time when tolling is in the public eye, the renegotiation of the Chapman's Peak PPP stands out as a sensible approach to what would otherwise have escalated into a public dispute with potentially high claims and costs to all parties.

11.5. Amendment and Renegotiation Framework

Treasury Regulation 16 also prescribes the procedures and approvals required throughout the procurement phase. In particular, clause 16.8 deals with amendments and variations to PPP agreements. Any material amendment due to renegotiations must meet the scrutiny and obtain approval of the relevant treasury in terms of:

- Value for money;
- Affordability; and
- Substantial technical, operational and financial risk transfer to the private party.

The mechanisms to seek this approval are prescribed in Treasury Regulation 16.

Although the term "material" is not defined in law, precedent on the use in the context of South Africa is that the test applied in the past and accepted by the National Treasury is that material amendments are those that will affect or impact on the foundation of the contract including the basis of the authorization. Put differently, material amendments will be those amendments that will go to the intrinsic qualities of the project that were prevalent at the time the Treasury gave its approvals.

This legal framework is further implemented using standardization, which provides guidance to the State and the private sector. Standardization is issued pursuant to the PFMA and Treasury Regulation 16 and regulates PPPs on a national and provincial level. Standardization is issued by the National Treasury and prescribes key issues and sets out the clear-cut contractual terms of the PPP agreement.

The Standardization states that: "*The Institution should not agree to any amendment of, or waiver of any rights under, any Project Document if such amendment or waiver may impact negatively on value for money, affordability or the risk profile of the Project. If such amendment or waiver also entails an amendment to the PPP Agreement itself that may be material, then the Institution may not agree to such amendment without the prior written approval of the relevant Treasury. Such approval will only be given if the PPP Agreement, as amended, will continue to provide value for money, be affordable for the Institution and transfer substantial risk to the Private Party.*"

Each PPP agreement has a regime for amendment and variations that are not material. These may be approved by the institution as the accounting authority and reported in its disclosures to the Treasury in accordance with treasury reporting requirements.

Similar to Australia and the UK, the amendment of PPP agreements is not triggered by any form of rescue of a project but rather by the changing needs of a project.

11.6. Refinancing Framework

South Africa has put in place explicit requirements for approval by the National Treasury for any refinancing that changes the risk profile of the project. This is in an effort to curb re-gearing of projects where the debt is underwritten partially (up to 90%) by the state. Refinancing gain shares on concessions remain at 50/50

11.7. Disclosure Framework

There is no regulatory-specific framework for disclosure in South Africa. The Treasury requires reporting in the Estimates of National Expenditure every year for every PPP.

These include the:

- Duration of public private partnership agreement;
- Escalation index for unitary fee;
- Net present value of all payment obligations discounted at appropriate duration government bond yield;
- Variations and amendments to public private partnership agreement;
- Cost implications of variations and amendments; and
- Significant contingent fiscal obligations including termination payments, guarantees, warranties and indemnities and maximum estimated value of such liabilities.

These are presented to the National Parliament every year and audited as part of the institution's annual report.

11.8. Contract Management

Contract management is prescribed for institutions by Treasury Practice Note 6 of 2004. This includes:

- Variations that involve no additional costs;
- Small works variations;
- Institutional variations; and
- Private party variations.

There are procedures for all these categories that must be used for all changes to the PPP agreement regarding works, services and the means of delivery. Given the length and complexity of PPP agreements, it is likely that these procedures will be invoked from time to time to deal with changing project needs.

11.9. Project examples

11.9.1. Gautrain

The Gautrain is an 80km rapid rail system that links Johannesburg with Pretoria, South Africa's capital, and OR Tambo International Airport. The Gautrain PPP is between the Gauteng Provincial Government (GPG) and Bombela Concession Company (the concessionaire). It was signed in September 2006 with a 19-year concession period. The project cost is USD2,5 billion with approximately USD2 billion in government capital grants paid against milestones in the pre-COD development phase. The remainder was in private sector debt and equity (85/15).

The government grant is linked to CPI and indexed annually so inflation risk is shared in the same proportion as the grant / private finance.

The project financial structure is based on a base case financial model, which is a schedule to the Concession Agreement. In it the base case return on equity is 18%. In return for a minimum revenue guarantee, the GPG receives 50% of any revenue earned above this base case return. Any changes to the concession from variations, change in law or project events is measured against the base case financial model to determine a no-better-no-worse position for the concessionaire.

The project stretches over some 80 kilometers for which the site had to be secured via expropriation or acquisition of servitude by the GPG. This could not be done before financial close so a project management plan was developed for handover of different parts of the site over time. Some parcels of land were handed over late to the concessionaire, giving rise to a claim for compensation.

The extended site in an urban area also meant that there was a strong likelihood of unknown utilities (water mains, power cables and the like). Flexibility was built into the Concession Agreement by specifying a lump sum to cover all such utilities and then setting out how any savings or additional costs above this base amount would be shared so as to incentivize both parties to efficiently and cost effectively identify and move such utilities.

The ongoing insurance requirements for such a large project were identified but costing them was difficult for bidders to do for the full concession period. It was deemed to be good value for money to also use a reference benchmark amount to be used in the Concession Agreement with savings shared between the parties on a bi-annual basis.

A strong variations procedure is built into the Concession Agreement allowing either the GPG or the concessionaire to request changes to scope. These are done on a structured basis and all capital works must be tendered in the operating period by the concessionaire. Each variation must leave the concessionaire in a "no-better-no worse" position.

11.9.1.1. Changes

There have been a number of variations in the concession to date. Some of these have been initiated by the GPG and a smaller number by the concessionaire to reflect scope changes generating cost savings. In total the variations have been less than 1% of capital cost.

In 2011, the contractual date for operating commencement date was missed. In order to commence a partial service, an interim operating period was agreed as an amendment to the Concession Agreement. In terms of this, the parties accepted the reduced revenues from a partial service and the concessionaire was made good by the civil contractor for delays.

In 2012, an agreement varying the Concession Agreement was entered into to regulate the savings to be shared between the parties for unknown utilities in the rail reserve and to carry out additional protection works to utilities outside the rail reserve.

In 2014, an ancillary revenue agreement regulating the additional revenue from sources such as advertising and ICT services was negotiated.

11.9.1.2. Triggers

The triggers depend on the cause, be it a contractual target date being missed or an opportunity to increase the revenue within the system.

11.9.1.3. Process

The process varies depending on the type of change.

- Variations are managed in terms of the Concession Agreement, which sets out a clear process for initiation and conclusion of variations.
- Amendments are negotiated in a formal process between the parties with the base case financial model as the reference of financial equilibrium in the no-better-no-worse requirement set in the Concession Agreement.

The amendments must be notified to the relevant treasury and a view sought as to their materiality (see section above on the regulatory environment). If material then the formal treasury approval is required.

To date no amendments have been material.

11.9.1.4. Approvals

The Gauteng Provincial Government has created an agency known as the Gautrain Management Agency (GMA) to manage its affairs with regard to the Concession Agreement and to undertake the obligations and exercise the rights of the Province in this regard.

The GMA is the accounting authority for the government and exercises delegated powers in making amendments to the Concession Agreement.

The provincial treasury is informed and consulted and is represented on the GMA Board.

11.9.1.5. Outcomes

All the amendments and variations to date have been voluntary amendments with the objective of preempting project distress in a structured manner based on the no-better-no-worse principle. The project is performing well with demand and revenue performing in line with forecasts. A beneficial refinancing is underway as is a variation to acquire additional rolling stock.

In such a complex arrangement, the concession agreement variation and amendment procedure is essential to managing the project effectively and in line with the National Treasury guidance on contract management.

11.9.1.6. Auditor general report

The GMA is audited annually on its performance of managing the concession. To date it has received clean audits in all aspects including the variations and amendments.

11.9.2. Chapman's Peak Drive

The Western Cape Provincial Government (the Province) entered into a Concession Agreement with a consortium of private sector companies named Entilini (Pty) Ltd (the concessionaire) in May 2003 for the design, build and operation of Chapman's Peak Drive (CPD). This contract was the culmination of work undertaken over the previous three years by the provincial Department of Transport and Public Works (DTPW) in terms of Treasury Regulation 16 governing such PPPs. A VGF capital grant of approximately 50% was approved as part of the concession. The road was successfully completed on time and to a high quality in very difficult mountain-side conditions.

Chapman's Peak is a very high-risk road perched on the side of a mountain in Cape Town. It is an important economic and tourist route linking the north and south of the city on the west side of Table Mountain.

A key contractual provision is that the concessionaire takes the first risk in relation to traffic. Once a debt-service coverage ratio of 1.00 is reached, the public sector agency provides support up to a maximum of 50% of the debt service in that period. The support is in the form of a temporary, interest-bearing advance to the concessionaire, which is repayable once cash flows improve above a DSCR of 1.0 over a period of time to be agreed with lenders. The support can continue for a maximum period of 18 months whereafter the support terminates and, failing additional shareholder or sponsor support for the project, the concessionaire will be in default under the loan agreements and a concessionaire-default termination will occur with the support amount advanced deducted from the termination payment made.

11.9.2.1. Changes

Because of a single outstanding environmental approval for the toll plazas, the concessionaire was unable to complete the toll plazas and for five years the concessionaire claimed payment to the extent that revenue was below forecast because such circumstances were classified as a "designated event" under the Concession Agreement. Between 2005 and 2008, the situation was exacerbated by a road closure due to what the concessionaire cited as dangerous road conditions. Given the lack of revenue incentive to keep the road open, this was contested by the Province and a public outcry raised political tempers.

The Minister of Transport in the Province appointed a joint task team of treasury and transport department officials assisted by financial, legal and technical advisors to investigate the matter. The task team's terms of reference may be summarized as:

- Establishing what happened to give rise to the current circumstances;
- Establishing whether there was any financial impropriety in any of the events;
- Establishing why things went wrong; and
- Providing options and recommendations as to what the Province should do in response to the circumstances.

The task team carried out a detailed financial and non-financial systems analysis to identify any fraudulent or financially inappropriate behavior by the concessionaire and the adequacy of the systems.

Compliance with technical and operational specifications was also analyzed.

The task team analyzed:

- The key, high impact causes of Project distress;
- The cost of termination of the concession under any of its provisions;
- The cost benefit analysis of the Project;
- The likely future financial outcomes for the Project; and
- Future scenarios on traffic volumes and revenues.

The task team concluded that based on affordability (cost), risk transfer and value for money it would be best to:

- Amend the Concession Agreement to provide more comprehensive definitions of the Closure Event and Damage Events and to prevent the concessionaire from unilaterally closing the road; and

- Provide revenue support to restore the concessionaire to its base case return on equity on the basis of an interest-bearing loan with repayments commencing when the base case RoE was exceeded.
- In return, post debt service date in 2018, 50% of all free cash flow was to be paid to the Province and the costs of future safety improvements would be shared.

This was then effected by means of an amendment of the Concession Agreement.

11.9.2.2. Triggers

The trigger was the closure of the drive for an extended period of time under the designated event regime caused by the delayed regulatory approvals for the project.

11.9.2.3. Process

The process involved:

- The notification of the National and Provincial Treasuries;
- The formation and mandating of the task team by the Minister of Transport in the Province;
- The analysis of the causes and outcomes of distress and recommendations by the task team;
- The mandate to negotiate within set parameters obtained from the high level committee in the Province made up of the Treasury and the Department of Transport;
- The negotiation;
- The approval of both Treasuries of the amendments; and
- Signing and implementation.

11.9.2.4. Approvals

The National Treasury approval in terms of TR16.8 as well as the support approval of the Provincial Treasury.

The approval of the lenders was obtained by the concessionaire.

11.9.2.5. Outcomes

The outcome has been a very stable project with steady traffic growth to over 90% of the forecast levels. Road closures have been minimized. The Province expects to make an overall saving in the concession period given the post debt service period revenue sharing.

11.9.2.6. Auditor general report

The project has not been audited.

12. United Kingdom

12.1. Background

Since 1992, the United Kingdom has used a form of public private partnership for the delivery of public services that is known as the Private Finance Initiative (PFI). The UK placed great emphasis on the concept of value for money in justifying the decision to procure infrastructure and the services coming from this infrastructure (for example, health, transport, education or custodial services) rather than by conventional procurement. By using the concept of PFI credits to supplement the existing budgetary allocations, HM Treasury was able to support a massive series of investments into infrastructure ranging from hospitals and schools to municipal infrastructure and roads in the period 1992 to 2010.

Under a typical PFI deal, the public sector enters into a long-term contractual arrangement with private sector companies, which undertake to design, build and operate an asset. There are around 700 PFI contracts in the UK. Over 500 of these are in England, with a combined capital value of almost GBP50 billion. The forecast PFI payment for these projects for 2010-2011 was estimated at GBP8 billion. They are usually long-term arrangements typically spanning 25 to 30 years. HM Treasury (the Treasury) estimates that the total commitments on current PFI contracts for the next 25 years for the UK are approximately GBP200 billion.

The United Kingdom thus provides one of the most interesting studies of a PPP program. Over the years this has been cited as the most successful PPP programme in terms of output of infrastructure and the achievement of value for money. It also yielded one of the most interesting forms of PPP unit in the world – a private company with a shareholding by the UK government as well as private sector companies by the name of Partnerships UK, or PUK.

It not only assisted in the delivery of roads, schools and hospitals, prisons and government buildings but also ventured into social housing, defense facilities, IT, minor ports and airport, rail and the like. For the period 1995 to 2007, the PFI was the world's most active PPP program.

It did, however, attract serious criticism, mostly because of the use of so-called PFI credits whereby public authorities could be granted budget for payments to the private sector for the delivery of services and infrastructure in the future (often up to 25 or even more years into the future). These PFI credits created a massive future liability for government and during the financial crisis and subsequent change in government in 2010 the PFI programme was reviewed and substantially cut. PUK was dissolved and re-integrated into the Treasury.

12.2. Institutional framework

A new entity, Infrastructure UK (IUK) was formed in the Treasury and the PPP programme became known as PF2.

IUK's core mandate is:

- To provide greater clarity and coordination over the planning, prioritization and enabling of investment in UK infrastructure; and

- To improve delivery of UK infrastructure through achieving greater value for money.

IUK has been set up as a separate unit within the Treasury, providing advice to the Commercial Secretary to the Treasury who leads on infrastructure issues and reports to the Chancellor of the Exchequer.

HM Treasury holds responsibility for setting PPP policy for England and this is devolved in Scotland, Wales and Northern Ireland. The Treasury publishes key policy, guidance and statistics on PPP/PFI and provides advice to departments undertaking or wishing to undertake PPP/PFI projects. The Treasury's focus is on ensuring that public sector asset and service investment programs maintain momentum, are value for money, sustain market confidence and deliver improved operational performance of projects.

Not all of IUK is focused on PPPs. IUK commercial specialists provide support to government on the delivery of major infrastructure projects to help ensure that the specification, design and procurement are undertaken effectively, particularly where there is an interface with private-sector investment. Some non-PPP projects supported by IUK are Crossrail, Broadband UK, Smart Meters, HS2, Mersey Gateway Bridge, A14 and Thames Tideway Tunnel plus other projects and programs.

IUK also informs the Economic Affairs Cabinet Sub-committee on Infrastructure. This support includes strategic, policy and delivery advice to Ministers to identify barriers to delivery of priority infrastructure projects and programs and to develop solutions.

There is no formal mandate granted by legislation for the PFI, or PPP program. As a result there are no PPP-specific approvals; instead all projects follow what is known as the "Gateway Approach" whereby projects must have their feasibility (financial and economic) tested and reviewed by reviewing agencies (including the Treasury).

Some reforms introduced to the PPP programme include:

- Introducing a control total for all commitments arising from off-balance sheet PF2 contracts signed;
- Requiring the private sector to provide equity return information for publication;
- Publishing an annual report detailing project and financial information on all projects where government holds a public sector equity stake;
- Introducing a business case approval tracker on the Treasury website;
- Introducing an open-book approach and a gain-share mechanism for the lifecycle fund to facilitate the sharing of any surplus lifecycle fund at the end of the contract; and
- Improving the information provisions within the standard contractual guidance.

In a 2009 report the National Audit Office (NAO) concluded that:

"…private finance can deliver benefits but is not suitable at any price or in every circumstance. Our paper also highlighted that, notwithstanding the available guidance, we had been unable to identify a truly robust and systematic evaluation of the actual performance of the use of private finance at either a project or programme level".

The 2011 NAO report on "Lessons from PFI and other Projects" reinforced this future-looking approach by stating that:

"In order to secure the best value for money, public sector bodies need to act as intelligent customers across the three phases to a capital project: specifying the requirements; negotiating the contract and arranging finance; and managing the asset and service delivery."

In particular, the emphasis would be on "*pushing the boundaries of existing commercial arrangements to get better outcomes from projects and programs for less*". In other words, to obtain better value on existing PFI contracts through re-negotiation of operational and financial terms and to improve procurement of future contracts in ways that take advantage of the central buying power of government and an open-book accounting approach by the private sector.

12.3. Project pipeline

IUK intends to apply the new objectives of the PF2 programme to the GBP1.75 billion privately-financed element of the Priority Schools Building Program (PSBP). The sponsoring department and the Treasury have been working closely to develop PF2.

IUK also hopes to roll out PF2 in the Ministry of Defence Future Force 2020 project and the Sandwell and West Birmingham Hospital Trust project.

The financing of these projects may shift away from traditional project finance with larger government equity stakes and even debt financing. Under PF2, the authority will look to take a minority equity stake in the project alongside its private sector equity investors. There is also a new requirement under PF2 requiring private sector equity investors to report on their actual and forecast equity return. To minimize potential conflicts, the equity investment will be managed by a commercially-focused central unit located within the Treasury, separated from the procurement authority. Investments need to have the same terms as the private sector and be managed by individuals with appropriate professional skills.

Under both PFI and PF2, the public sector shares the gains arising from a refinancing of the debt. In cases where refinancing arises out of the increased advantageous economic conditions created or facilitated by government, the government refinancing share can be as high as 90%.

Increased transparency will assist the public in understanding the equity returns to the private sector, track business case approvals, facilitate the sharing of any surplus lifecycle funds at contract expiry, improving terms within the contracts and improved disclosure of contingent and other future liabilities to the taxpayer.

In addition, PF2 hopes to broaden sources of equity and debt finance through the introduction of funding competitions for a proportion of equity, particularly to attract long-term investors prior to financial close and introduce a wider range of debt-financing instruments such as bonds, multilateral debt products and commercial debt. To meet this objective, government is supporting UK Guarantees and co-lending for PFI projects and housing guarantees. It has increased capital contributions, established the Green Investment Bank and entered into a number of memorandums of understanding with institutional investors, pension funds and export credit providers (HM Treasury, 2012).

12.4. Projects history

In an interview with an ex-official from Partnerships UK (the predecessor to IUK), he cited the great stability of the PFI projects as a result of the PFI availability payment model. The criticism of this has been the cost and the perception of windfall gains, combined with poor value for money for the public sector, and not on project stress or distress.

There was not a need for a specific approval regime for renegotiation or the agreement of material contract changes for PPP contracts in the UK. They are covered by the general procedures for approvals. In practice this means that the change would only have to be approved if it fell outside the delegated limits of the department or public sector entity and normally the first thing to kick in would be European procurement rules, which would determine whether a re-tender would be needed. This has created great flexibility (see above for the Directives' rules on changes to the PPP agreements) for the authorities themselves to change elements of the agreements to maximize value for money. These have particularly been in the areas of scope changes, benchmarking exercises and refinancing.

In his view, the change protocol in PPPs has been very useful and worked well. It has introduced a necessary flexibility to handle change and has been balanced by generally well-prepared projects that have dealt with likely changes in the competitive environment of bidding as well as possible. He stressed the need for the best possible project preparation and referred to SoPC4 where it says: "*With PF2 Contracts ranging from 20 to 30 years, it is inevitable that changes will occur that cannot be anticipated at the start. Provided long-term requirements have been well thought through and adequate flexibility built into the design of the Contract, the frequency and impact of unanticipated changes should be limited and manageable.*"

On the infamous London Underground PPP, the ex-official was of the firm view that this should never have been a PPP and that the primary lesson learned was not to undertake massive, high-risk projects in a contested public arena as PPPs. The renegotiation was, in his opinion, an extraction at minimum loss to government from a messy project.

12.5. Amendment and Renegotiation Framework

The change mechanism for UK projects is set out in Operational Taskforce Note 3: Variations Protocol for Operational Projects of 2008 and Standardization of PFI Contracts 4 (SOPC4) of 2007. The objective is to have well-developed change mechanisms written into the contract to achieve at least the following four outcomes:

- Clear process, with clearly defined roles, responsibilities and timescales;
- Quick and efficient procedures (appropriate to the scale and complexity of the change required), with transaction time and cost kept to a minimum;
- Transparent pricing; and
- Value for money.

The changes are divided into broad categories of who requests them (authority or private party), when they are requested (stage of the PPP) and size. These differentiate only in process;

broadly there is great flexibility to initiate change from either party at any time and to any value within the prescripts of the EU directive (see above).

All changes are approved by the authority itself and are subject to its ability to pay for the change. Most changes have been requested by the public authority.

Size-wise the distinction is between small, medium and high value changes. These are broadly less than GBP10,000, less than 2% change to the unitary charge and greater than 2% of the unitary charge. For high value changes, an extensive due diligence process is used to ensure that the public sector achieves value for money. Authorities must carry out substantial preparatory work in scoping this type of change before issuing a formal variation notice. For example, the authority's technical adviser should provide an estimate of the cost of the change before the variation process is started.

In addition to the change regime, there are also the Relief, Compensation, Change in Law and Force Majeure principles built into each PPP agreement. These provide for supervening occurrences outside the control of the private party and their consequences are set out in the contract.

Compensation events are events that are at the authority's risk and in respect of which the contractor should be compensated to restore it to the financial state without the compensation event.

Relief events are events that are best managed by the contractor (although not necessarily in its control) and for which the contractor bears the financial risk, but in respect of which no rights of termination should arise and liquidated damages are waived.

Force Majeure events are a limited set of events that arise through no fault of either party, which are best managed by the contractor (although not in its control) and in respect of which rights of termination can arise.

Because the unitary charge is indexed and because the construction period financing is well hedged, macro-economic shocks are not an issue for projects currently in operation. The financing arrangements post financial crisis have changed to the extent that PF2 is looking at better value arrangements in the financing as set out above.

12.6. Refinancing Framework

The UK has a specific regime for the refinancing of its PFI contracts setting out a right to refinance by the Concessionaire under various circumstances and the gain share between the Concessionaire and the public authority. It has requirements for the concessionaire to provide the authority with full details of any proposed refinancing, including a copy of the proposed financial model and the basis for the assumptions used in the proposed financial model. The authority has unrestricted rights of audit over any financial model and documentation and the refinancing cannot proceed without its approval. HM Treasury guidance is that no refinancing that increases the amount of debt should be approved by the authority without a very careful consideration of the risks attached to the refinancing.

The UK has moved quite aggressively in revised Standardisation of PFI Contracts to increase the gain share from 50% to a position:

(a) where there is a reduction in the debt margin from the margin as shown in the loan documentation as at financial close arising from a refinancing a 90% share of the refinancing gain arising from the change in margin and

(b) a share of any further refinancing gain (arising otherwise than from a reduction in margin) from a refinancing, in respect of any refinancing gain as follows:

(i) for a Refinancing Gain from £1 to £1 million, a 50% share;

(ii) for a Refinancing Gain of £1 million up to £3 million, a 60% share; and

(iii) for a Refinancing Gain in excess of £3 million a 70% share.

This is because the changes in margins are driven primarily by economic conditions and are therefore not the gain of the concessionaire.

12.7. Disclosure Framework

The UK has a strong disclosure framework with reporting to the authorities themselves as well as to HM Treasury and Parliament. All PFI contracts are subject to audit by the National Audit Office.

In addition, the NAO undertakes regular audits on matters such as the achievement of value for money across sectors and the overall PFI program.

12.8. Contract Management

The public authority is responsible for the contract management and is required to appoint a qualified and experienced contract management team (or individual for smaller projects). It is a highly developed system with high levels of devolution. It is interesting to note though that the NAO, in a 2011 report, stated that:

"The lack of commercial skills to match those of the private sector can put the public sector at a disadvantage in the negotiation and management of contracts. Since our 2009 report on commercial skills for complex projects, the Government has taken steps to improve commercial skills across the public sector. Despite this, the public sector's skills are generally not as well developed as their private sector counterparts, which puts value for money at risk. The risk arises in particular during the life of the contract. Major contractors and investors can improve their returns through cost efficiencies not shared with the public sector, or, high margins on the changes in asset usage which are likely to occur over a long contract."

13. Chilean PPP Program

13.1. Background

According to Engel,[12] Chile has one of the most successful PPP programs among developing countries. Some USD11 billion investments in public infrastructure have been made and these investments have substantially improved the infrastructure and reduced transport costs. The private pension funds and the life insurance companies, with their large pools of long-term savings, have been active investors in bonds issued by large PPP projects.

On the down side, Chile also has a history of widespread renegotiations (both in terms of numbers and prevalence in all sectors). It stands out in sharp contradistinction with the other International Comparator Countries in the number of formal renegotiations. It is also the only country in the four that has a formal part of PPP legislation dealing with renegotiation.

13.2. Institutional Framework

In 2010, Chile established a new normative framework for PPPs by sanctioning the Law on Concessions of Public Works (Ley de Concesiones de Obras Públicas), which modified the original legislation on concessions dating from 1996 (Ley de Concesiones, Decreto Ministerio de Obras Públicas no.900). The Ministry of Public Works (MoP) is the responsible authority. Contracts must be awarded in competitive procurements open to any firm, national or foreign.

The law allows for the creation of a PPP agreement to the requirements of each project. In particular, the tendering variables can include user fees, subsidy from the state, duration of the concession, income guaranteed by the state, revenue paid by the franchise holder to the state for preexisting infrastructure, risk assumed by the bidder during the construction and/or operation stages, quality of the technical offer, fraction of revenue (beyond a certain threshold) shared with the state (or users), and total income from the concession.[13]

Institutionally, while the MoP leads, awards and administers PPPs, the Ministry of Finance has an important counterbalancing role in providing key approvals and monitoring of the PPP process, including bidding conditions, amendments to the concession contracts, dispute resolution settlements and others. To provide reassurance that the PPP programme fits within government's fiscal program, an officer from the Ministry of Finance sits within MoP and has the authority to stop any project.

The Chilean PPP unit is located within the MoP and consists of about 300 staff with specialized knowledge.

Fischer describes the financing arrangements for a typical highway PPP as being in several stages:

- Bidders must offer call bonds (bonos de garantía) that can be called in by the government if the bidder cannot finance the project. Similar bonds are callable if construction targets are not achieved by predetermined dates or quality maintenance standards are not met.
- Banks lend money for construction of the road. The law stipulates that banks are the only financial institutions that may lend to finance construction.

- After the road is built, the concessionaire can issue bonds backed by toll revenues.
- These coupon bonds are usually bought by private pension funds and insurance companies. The law stipulates that the concessionaire cannot securitize more than 70% of the debt.

13.3. Project pipeline

Chile has a strong pipeline of future PPP projects, with the following in tender stages: Since January 2012 two highway concessions at a value of USD582 million have reached financial close; 12 concessions have been awarded to a value of USD4,8 billion (a single power plant of USD 2,1 billion included) and three concessions are in the tendering stage.

13.4. Project history

Between 1993 and 2006, the Ministry of Public Works awarded 50 PPPs: 26 roads, 10 airports, 3 prisons, 2 water reservoirs, 5 public transportation projects, 4 other.

In the highways sector, the particulars of concession contracts vary, but they also share common features.

Fifteen out of the 26 highway concessions have been awarded with subsidies and, according to Fischer, all received minimum income guarantees. Thus, direct and contingent subsidies are almost a given when it comes to highways. At the same time, 22 highway contracts include revenue sharing between the state and the concessionaire.

By 2007, there had been 148 renegotiations of PPP contracts; on average each contract had been renegotiated three times.

Fifty concessions were reviewed between 1993 and 2006 by Engel et al (2009) for observable implications of renegotiations. Of the 50, 89% are road concessions. There were 78 bilateral renegotiations and the rest by arbitration panels. Of the USD2.3 billion awarded in bilateral renegotiations (84% for additional works, 16% for additional payment for works), only 35% of the additional costs were borne by the administration that renegotiated the agreements. Of the total, 78% was awarded during the construction phase.

13.5. Amendment and renegotiation framework

According to the Public Works Concession Law (Statutory Decree N° 164, 1991, the "Concession Law"), there are a number of permissible changes to the Concession Agreement. Several modifications were made to the Concessions Law in 1996 which allowed broader scope for Public Works concessions and clarified and improved operational procedures of the framework. Early in 2010, the PPP framework was amended with Law No.20,410 introducing limits on renegotiations and strengthening institutional defense (Vittor, 2011).

These changes were based on lessons learned from application of the previous versions of the Concessions Law. In providing input to the new law in 2010, PPP specialist researchers and economists,[14] articulated some of the challenges experienced. These include:

- The social objective of the Concessions Law is to deliver services of high quality without users and the government having to pay more than necessary. The mechanisms for achieving this objective are:
    - granting concessions,
    - using the contractual system to select the best companies, and
    - offering them incentives to do their job well.
- In this context, incomplete contracts can give rise to opportunistic behaviour on the part of both the concession holders and the State. Therefore, how the legislation addresses these situations and provides solutions is crucial.
- The MoP plans, executes, and oversees, which means that it can renegotiate any mistakes it makes;
- Renegotiations exceed reasonable limits and take place behind closed doors;
- The concession contract has little value in the determination of disputes because the arbiters base their judgments on the principle of equity, not on the law;
- Supplementary work is not tendered for bids but rather negotiated bilaterally;
- The current law allows the concession holder to suspend work in order to renegotiate;
- The more contract changes that are made after the call for tender, the less relevant the bidding process becomes.

The submissions on improvements to the law included:

- In an ideal system, the MoP should plan and execute, but it should not make decisions or oversee at the same time.
- The concession contract should set the rules for renegotiation and the standards for service.
- The Government should oversee the contracts through an institution other than the MoP, because if the MoP makes a mistake in the course of its activities, it will not report it.
- If concessions are to help solve the country's infrastructure problem, there must be competitive bidding and a limit needs to be placed on subsequent contract changes that undermine the relevance of the original call for tender.
- That additional work must be the subject of a new call for tender whenever the amount involved is sizable and represents a significant percentage of the original tender
- The compensation for the concession holder should have a net present value of zero —in other words, its opportunity for profit should correspond to what it had to invest. This is a basic principle that should be applied to all work that is tendered for competitive bids, to ensure that the project belongs to the taxpayers while the concession holders still receive a reasonable profit.
- If the cost turns out to be greater than the concession holder originally estimated, the difference should be deducted from its earnings rather than renegotiated. It is generally true

in calls for tender that bidders will lower their prices to win a contract when they expect that it can be renegotiated.

- There should also be legal provisions that give the State the flexibility to terminate a concession in advance as long as it pays to cover the concession holder's loss of income.
- Auctions based on the least present value of revenue (LPVR) should not be the exception; they should be used whenever they are appropriate.
- Concessions should use, for determination of disputes, a Panel of Experts similar to that established for the electric power sector. The experience with this panel has been successful and it has reduced disputes in the sector. It offers the advantage of bringing together the experience of professionals from a variety of fields from the private, public, and academic sectors. Disputes between private parties and between private parties and the public sector are resolved within 35 working days. Its resolutions are public and reflect the positions of the parties concerned with a view to bringing the sides together.

In response to these inputs, the Concessions Law of 2010 has made some substantial changes to Chilean concessions. Article 20 (read with Article 19) allows the parties to agree to change the works and services contracted, in order to raise the service levels and technical standards, by up to 15% (which figure is established in the bidding conditions) of the approved capital value. If there is no cost to the public sector then no agreement is necessary.

Where conditions subsequent to the signature of the concession agreement require additional investment by the concessionaire, the MoP and the concessionaire may increase the additional investment value by 20% in terms of an amendment agreement that is also approved by the Ministry of Finance. The Ministry of Public Works must be able to justify the changes for duly substantiated reasons of public interest in a public report.

To prevent monopolistic pricing, if the increase exceeds 5% of the approved capital works then it must be put out to open tender by the concessionaire. The concessionaire is then compensated by one or a combination of subsidies provided by the State, voluntary payment made directly to the concession holder by third parties interested in the development of the works, modification to the current amount of the concession total revenues, change in the concession term period, modification to the rates or any other factor of the concession's agreed-upon economic regime.

In exceptional circumstances and only in the construction phase exceed25% of the capital budget, the amendment agreement must be approved by the Ministry of Public Works and the Ministry of Finance. Conditions for the amendment include that the facts and circumstances giving rise to the amendment occur after the awarding of the concession, and could not be foreseen upon its awarding and that, for reasons including expertise, behavior, performance, social and environmental impacts, management economies or economies of scale; awarding the new works to the original concession holder is more efficient than granting a new concession. The Technical Panel established in the amended Concessions Law and made up of independent experts must verify that these conditions are met by the by the amendment and that the compensation is in accordance with the principles set out in Articles 19 and 20.

These say that, in all cases, compensation to the concessionaire must be calculated and paid in such a way as to get the net present value of the additional project to equal zero, taking into account the applicable discount rate and the economic effect the additional project may have on the original project, including the higher risk that may occur.

In addition, the 2010 modified Concessions Law allows several changes, namely (Vittor, 2011):

- For a concession commission whose main role is to advise the MoP on infrastructure projects and the nature of an appropriate concession contract;
- A technical panel to listen to technical and economic disputes between the MoP and the concessionaire and issue recommendations as a dispute resolution mechanism prior to arbitration;
- An arbitration commission with increased power to decide substantive legal disputes;
- A process for the concessionaire to apply for compensation for amendment of works or services as requested by government that differs from the bidding terms;
- A registry of contractors (maintained by MoP) including a five-year prohibition on future concessions for contractors and subcontractors found to be in gross non-compliance of the contract; and
- Regulation of fines imposed upon concession users not paying tolls.

The Technical Panel established by the 2010 Concession Law creates quasi-independent regulator capable of making recommendations on matters arising between the parties during the execution of the concession contract at the request of either of the parties including:

- Technical and economic evaluations of the investments made by the concessionaire, their status of progress, of their costs and term periods, in accordance with the levels of service and technical standards established in the appropriate concession;
- Determination of the existence of additional costs and their economic, technical or managerial causes, or of other events or circumstances technically affecting, or that may technically affect, the regular development of the works during the construction stage;
- Verification that the value of the investments has surpassed some of the limits set in the Law on Concessions;
- Determination of the economic effects the execution of additional works would have on the concession;
- Technical determination of the discount rate, financial costs and all other economic factors that must be established to determine the economic compensation due in accordance with the concession agreement; and
- All other technical or economic discrepancies that the parties to a concession contract may have with each other as a result of the execution of the contract.

Initially the technical panel operates as a conciliation panel and, should no agreement be reached, it can then issue instruction and the parties can take the dispute to the arbitration commission or Santiago Court of Appeals for a ruling.

The Technical Panel is made up of professionals with an "outstanding professional and academic track record" in the infrastructure concession sector being two lawyers; two engineers, and a professional specialising in economics or finance. No person with any contractual relationship with concession holding companies or their subcontractors or to the Ministry of Public Works for a period of twelve months prior to their nomination is eligible. The members of the Technical Panel are appointed by the Upper Public Management Council after by way of a public selection process performed in objective, transparent and non-discriminatory conditions.

The tenure of members of the Technical Panel is six years and the all the administrative and operating costs of the Panel as well as half of the members' fees are born by the MoP. The other half of the fees is paid by existing concessionaires.

13.6. Disclosure framework

Bidding rules, pre-project documents, background studies and other technical project documents, as well as side letters, changes to the tariff system, and changes to the contract must by law be made public. Technical monitoring reports produced monthly by contract managers on performance assessment, containing information on services, accidents, user feedback, amongst other things, are disclosed regularly for all projects. Financial information is provided periodically by the private operators to the public authority.

13.7. Contract management

MoP supervises the construction and operation of the project, and is allowed to fine, suspend or even terminate the concession should the franchise holder fail to meet obligations. The law also establishes a dispute resolution mechanism to review conflicts between the state and concessionaire.

13.8. Examples

The following two examples (Engel, 2009) demonstrate how government used renegotiations to bypass congressional approval for increased expenditure.

- The rainwater collectors. Santiago was prone to flooding and in 2001 the government, under political pressure, decided to construct new main rainwater collectors. As further indebtedness or limited budgetary resources were the constraints, government decided to renegotiate the contracts of urban highways. Hundreds of millions of dollars were renegotiated to form part of the construction of the highways, which would be paid for some time in the future.
- The San Antonio Bypass. To access the main port of Chile, trucks had to travel through the city of San Antonio. A special access route to bypass the city was designed. There were three options to finance the route: (i) fund it from the fiscus (ii) independent self-financed tolled concession or (iii) non-tolled extension to an existing Route 78. The President promised the public that he would not toll the route, so it was decided to renegotiate the contract, valuing the 8km at around USD45 million. An increase in tolls in the existing contract together with a further tariff increase was the result.

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Annexure B1: EU Directive on Concessions

DIRECTIVE 2014/23/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 26 February 2014

on the award of concession contracts

Article 43

Modification of contracts during their term

1. Concessions may be modified without a new concession award procedure in accordance with this Directive in **any** of the following cases:

   a. where the modifications, irrespective of their monetary value, have been provided for in the initial concession documents in clear, precise and unequivocal review clauses, which may include value revision clauses, or options. Such clauses shall state the scope and nature of possible modifications or options as well as the conditions under which they may be used. They shall not provide for modifications or options that would alter the overall nature of the concession;

   b. for additional works or services by the original concessionaire that have become necessary and that were not included in the initial concession where a change of concessionaire:

      i. cannot be made for economic or technical reasons such as requirements of interchangeability or interoperability with existing equipment, services or installations procured under the initial concession; and

      ii. would cause significant inconvenience or substantial duplication of costs for the contracting authority or contracting entity.

However, in the case of concessions awarded by a contracting authority, for the purposes of pursuing an activity other than those referred to in Annex II, any increase in value shall not exceed 50% of the value of the original concession.[15] Where several successive modifications are made, that limitation shall apply to the value of each modification. Such consecutive modifications shall not be aimed at circumventing this Directive;

   c. where **all** of the following conditions are fulfilled:

      i. the need for modification has been brought about by circumstances which a diligent contracting authority or contracting entity could not foresee;

      ii. the modification does not alter the overall nature of the concession;

      iii. in the case of concessions awarded by contracting authority, for the purposes of pursuing an activity other than those referred to in Annex II, any increase in value is not higher than 50 % of the value of the initial concession. Where several successive modifications are made, this limitation shall apply to the value of each modification. Such consecutive modifications shall not be aimed at circumventing this Directive;

d. where a new concessionaire replaces the one to which the contracting authority or the contracting entity had initially awarded the concession as a consequence of either:

   i. an unequivocal review clause or option in conformity with point (a);

   ii. universal or partial succession into the position of the initial concessionaire, following corporate restructuring, including takeover, merger, acquisition or insolvency, of another economic operator that fulfils the criteria for qualitative selection initially established provided that this does not entail other substantial modifications to the contract and is not aimed at circumventing the application of this Directive; or

   iii. in the event that the contracting authority or contracting entity itself assumes the main concessionaire's obligations towards its subcontractors where this possibility is provided for under national legislation;

e. where the modifications, irrespective of their value, are not substantial within the meaning of paragraph 4.

Contracting authorities or contracting entities having modified a concession in the cases set out under points (b) and (c) of this paragraph shall publish a notice to that effect in the Official Journal of the European Union. Such notice shall contain the information set out in Annex XI and shall be published in accordance with Article 33.

2. Furthermore, and without any need to verify whether the conditions set out under points (a) to (d) of paragraph 4 are met, concessions may equally be modified without a new concession award procedure in accordance with this Directive being necessary where the value of the modification is below both of the following values:

   i. the threshold set out in Article 8;[16] and

   ii. 10% of the value of the initial concession.

However, the modification may not alter the overall nature of the concession. Where several successive modifications are made, the value shall be assessed on the basis of the net cumulative value of the successive modifications.

3. For the purpose of the calculation of the value referred to in paragraph 2 and points (b) and (c) of paragraph 1, the updated value shall be the reference value when the concession includes an indexation clause. If the concession does not include an indexation clause, the updated value shall be calculated taking into account the average inflation in the Member State of the contracting authority or of the contracting entity.

4. A modification of a concession during its term shall be considered to be substantial within the meaning of point (e) of paragraph 1, where it renders the concession materially different in character from the one initially concluded. In any event, without prejudice to paragraphs 1 and 2, a modification shall be considered to be substantial where one or more of the following conditions is met:

   a. the modification introduces conditions which, had they been part of the initial concession award procedure, would have allowed for the admission of applicants other than those initially selected or for the acceptance of a tender other than that originally accepted or would have attracted additional participants in the concession award procedure;

b. the modification changes the economic balance of the concession in favour of the concessionaire in a manner which was not provided for in the initial concession;

c. the modification extends the scope of the concession considerably;

d. where a new concessionaire replaces the one to which the contracting authority or contracting entity had initially awarded the concession in other cases than those provided for under point (d) of paragraph 1.

5. A new concession award procedure in accordance with this Directive shall be required for other modifications of the provisions of a concession during its term than those provided for under paragraphs 1 and 2.

Annexure C: NHAI Data

Sl. No.	Name of project (stretch)	Length of the stretch	Nature of contract (BOT/ DBFOT/ Annuity/ OMT/ EPC)	Project cost (Rs.)	Name of SPV	Name of promoter	Project IRR (as per submitted cashflow)	Concession period	COD	Equity component (Cr.)	Debt component (Cr.)	VGF (if any) Cr.	Status of the project
	Four laning of Godhra to Gujarat/Madhya Pradesh Border Section of NH-59, from km 129.300 to km 215.900 in the state of Gujarat on Design, Build, Finance, Operate and transfer ("DBFOT") basis under NHDP III"	87.102 km	DBFOT	750 Cr.	Soma Isolux Varanasi Aurangabad Tollway (P) Ltd	1. Isolux Corsan Concessions S.A, 2. Isolux Corsan Concessions India (P) Ltd, 3. Soma Enterprises Ltd , 4. Soma Tollways (P) Ltd	18.86%	27 years incl. construction period	PCOD – 02.11.2013	Rs. 225 Cr.	Rs. 525 Cr.	Nil	Under Operation & Maintenance
2	Six laning of Pune Satara Sectin of NH4 from km 725 to km 865/350	140/350	DBFOT	1724.55 Cr.	M/s PS Toll Road Pvt. Ltd.	M/s Reliance Infrastructure Ltd. JV M/s Jigansu Provincial Transportation Engineering Group Co. Ltd. Consortium	11.98%	24 years	01-Oct-10	893.15 Cr.	1091.63 Cr.	Nil	Under Operation & Maintenance
3	Four laning of Gwalior-Shivpuri Section of NH-3 from km 15.600 of NH-75(End of Gwalior bypass) to km 236.00 of NH-3 in the State of Madhya Pradesh on BOT (Toll) on DBFOT Pattern under NHDP Phase-IV.	125.3 km	DBFOT (Toll)	1055 Cr.	M/S. Essel Gwalior-Shivpuri Toll Roads Pvt. Ltd.	M/s Essel Infra Project Limited	10.82%	29 Yrs.	11 Nov, 2015 (Scheduled completion date)	Rs. 406 Cr.	Rs. 1195 Cr.	Not applicable	Under Construction
4	Four/Two-Laning of Rimuli-Roxy-Rajamunda Section of NH-215 from km 163.000 to km 269.000 in the State of Odisha on Design, Build, Finance, Operate and Transfer (Toll) Basis under NHDP-Phase-III	96.453 kms	DBFOT	586 Cr.	Orissa Steel Expressway Private Limited (OSEPL)	MBL Infrastructures Limited (JV) SREI Infrastructure Finance Limited	14.38%	19 years from date of appointment	15th January 2014	134.42	313.64	229.95 Cr. (Grant)	Under Construction

Sl. No.	Name of project (stretch)	Length of the stretch	Nature of contract (BOT/ DBFOT/ Annuity/ OMT/ EPC)	Project cost (Rs.)	Name of SPV	Name of promoter	Project IRR (as per submitted cashflow)	Concession period	COD	Equity component (Cr.)	Debt component (Cr.)	VGF (if any) Cr.	Status of the project
5	4 laning of Muzaffarnagar – Haridwar Section of NH – 58, km.131.00 to km. 211.00, in the state of Uttar Pradesh & Uttrakhand on DBFOT (Toll) basis under NHDP-Phase III (Package no. IE/ NHDP-III/UP/04)	80 km	BOT (Toll)	Rs. 754 Cr.	M/s Haridwar Highways Project Limited	1. M/s ERA Infra Engg. Ltd, Indian, Lead member 2. OJSC SIBMOST, Russian	18.82%	25 years	Project Under Construction stage	Rs. 200 Cr. As per Fin Model at the time Financial Close)	Rs.690.60 Cr.	Rs. 210 Cr.	Under Construction
6	Design, Construction, Development, Finance, Operation and Maintenance of Km. 367.000 (Adloor Yellareddy) to (Km. 447.000 and II) Improvement, Operation & Maintenance of Km.447.000 to 464.000 (Gundla Pochamapalli) on NH–7	Km 103.076	BOT, Annuity	546.16 Cr.	M/s. GMR Pochanpalli Expressways Pvt Ltd.	GMR Infrastructure Ltd.	13.32%	20 years	26.03.2009	18.25 Cr.	538.92 Cr.	Not applicable	Under Operation & Maintenance
7	Design,Construction,Development,Finance,OperationandMaintenanceof4/6laningofHyderabad-VijaywadaSectionfromkm40tokm221.500onNH-9inthe state of Andhra Pradesh under NHDP Phase-III	181.873	DBFOT	Const-ruction cost Rs 1740 Cr. (Total cost Rs 2269 Cr.)	GMR Hyderabad Vijaywada Expressways Pvt. Limited	GMR Infrastructure Limited and Punj Lloyd Limited	12.96%	15 Years if 4-Laning and 25 years if 6-laning	20th December 2012(PCOD)	Rs. 504 cr. As per FC	Rs. 1690 cr. As per FC	Under Operation & Maintenance	
8	8/6 Lane Access Controlled Highway - NH8, Km. 14.3 to Km. 42.0 (Delhi Gurgaon)	27.7 km	BOT	Rs. 5,550.00 million	Millennium City Expressways Private Limited (w.e.f. 19.05.2014)	NA	NA	20 years	23-01-2008	NA	1146	Not Applicable	Under Operation & Maintenance

Sl. No.	Name of project (stretch)	Length of the stretch	Nature of contract (BOT/ DBFOT/ Annuity/ OMT/ EPC)	Project cost (Rs.)	Name of SPV	Name of promoter	Project IRR (as per submitted cashflow)	Concession period	COD	Equity component (Cr.)	Debt component (Cr.)	VGF (if any) Cr.	Status of the project
9	Hazaribag-Ranchi	73.799	BOT (Annuity)	Rs. 625.07 Cr (NHAI), 869.18 (Concess-ionaire)	M/s Hazaribag Ranchi Expressways Ltd	M/s IL&FS & M/s Punj Lloyd Limited		18 years	Partial COD: 15.09.2012	Rs. 131 Cr.	Rs. 738.18 Cr.	Not Applicable	Under Construction
10	Four laning of Gwalior-Jhansi section of NH-75 from km 16.00 to km 96.127 in the State of Madhya Pradesh & Uttar Pradesh	80.127 km (68.627 km in MP)	BOT (Annuity)	Rs. 604 Cr.	M/s Gwalior-Jhansi Expressway Limited	M/s D.S. Construction Ltd, M/s Apollo Enterpises Ltd.	11.94%	20 years	Not achieved	216.40 Cr.	504.92 Cr.	Not Applicable	Under Construction (work has been stopped by concession-aire since March, 2012)
11	Improvement, Operation and Maintenance including strengthening and widening of Existing 2 lane road to 4 lane dual carriageway from km 12.600 to km 84.700 of NH-3 (Indore-Khalghat Section) in the State of Madhya Pradesh on Build, Operate and Transfer (BOT) basis	77.55 km	BOT	Rs. 472 Cr.	M/s Oriental Pathways (Indore) Pvt. Ltd	M/s Oriental Structural Engg. Pvt. Ltd., M/s Delhi Brass & Metal works Pvt. Ltd		20 years (3 years for construction and 17 years for O&M)	20.08.2009	Rs. 130 Cr.	Rs. 520 Cr.	Nil	Under Operation & Maintenance
12	4 laning of Gomati Chauraha – Udaipur Section of NH-8 (from km 177/000 to km 260/100) in the State of Rajasthan under NHDP Phase IV on Design, Built, Finance, Operate and Transfer (Toll) basis	79.31 km	DBFOT	914.50 Cr. (TPC)	Shreenathji Udaipur Tollway Private Limited	Sadbhav Engineering Limited (26%) and Sadbhav Infrastructure Projects Ltd. (74%)	13.81%	27 years from appointed date	Project under construction stage	311.46	840	Nil	Under Construction

Sl. No.	Name of project (stretch)	Length of the stretch	Nature of contract (BOT/ DBFOT/ Annuity/ OMT/ EPC)	Project cost (Rs.)	Name of SPV	Name of promoter	Project IRR (as per submitted cashflow)	Concession period	COD	Equity component (Cr.)	Debt component (Cr.)	VGF (if any) Cr.	Status of the project
13	Two lane with paved shoulders Aligarh to Kanpur section at km.140.000 km.to418.162 km. of NH-91 DBFOT basis	278.162 km	DBFOT	Rs. 975 Cr.	M/s Lanco Kanpur Highway Limited	M/s Lanco Infratech Ltd		12 years	Work not started	Nil	Nil	Nil	Construction not started due to some issues : mutual termination proposed
14	Design Engineering, Financing, Procurement, Construction, Operation and Maintenance of 4 laning of Cuddapah - Kurnool section of NH - 18 from the existing km 167.750 to km 356.502 in the State of Andhra Pradesh under NHDP Phase - III on BOT Basis	188.752 km	DBFOT	1585 Cr.	M/s. Rayalseema Expressway Pvt. Ltd	–	1636 Cr. (Financial closure)	30 years including construction period from Appointed Date	Not yet issued	311.00 Cr.	703.00 Cr.	622.00 Cr.	Under Construction
15	Varanasi Aurangabad section of NH2 from km:786+000 to 978+400 in the state of UP&Bihar on Design, Build, Finance, Operate and Transfer(DBFOT) Toll basis under NHDPPhase-V	192.4 km	DBFOT	3379.50 Cr.	Soma Isolux Varanasi Aurangabad Tollway (P) Ltd	1. Isolux Corsan Concessions S.A, 2. Isolux Corsan Concessions India (P) Ltd, 3. Soma Enterprises Ltd , 4. Soma Tollways (P) Ltd	15.02%	30 years	12th September, 2011 (on Appointed Date)	964.45 Cr.	1850.00 Cr.	565.00 Cr.	Under Construction

Annexure D: Ministry of Shipping Data

Ministry of Shipping

Data reqd. by World Bank Consultants about Contract Renegotiation (PPP Projects)

Yearwise data of Awarded Projects

Year	No. of Projects	Investment (Rs. In Cr.)	Capacity (MTPA)
1995-96	2	61.77	5
1996-97	1	750.00	13.2
1997-98	3	1130.00	24.5
1998-99	2	300.00	10.5
1999-00	0	0.00	0
2000-01	1	27.00	1.5
2001-02	4	1152.03	19.62
2002-03	2	198.35	5.88
2003-04	1	703.34	13.5
2004-05	3	3445.50	54.6
2005-06	1	20.00	3.5
2006-07	6	2118.00	42.8
2007-08	3	1613.00	20.6
2008-09	4	4442.45	14.4
2009-10	11	2744.95	61.37
2010-11	9	3817.46	58.92
2011-12	3	7735.74	79.32
2012-13	11	1780.50	39.2
2013-14	14	17839.83	101.52
Total	81	49879.92	569.93

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Yearwise data "Across All Projects"

Number of projects by year since comm-ence-ment	Number awarded	Number actually imple-mented	Type and estimated max freight capacity at time of signing	Form of Model Concess-ion Agree-ment used	Total project cost at signature date	Tariff regime applied	Average debt/ equity ratio at CA signing date (if known)	Number in distress (see d above)	Number termin-ated
1995-96	2	2	5	*	61.77	RoC	N.A.		
1996-97	1	1	13.2	*	750.00	RoC	N.A.		
1997-98	3	3	24.5	*	1130.00	RoC	N.A.		
1998-99	2	2	10.5	*	300.00	RoC	N.A.	1	
1999-00	0	0	0	*	0.00	RoC	N.A.		
2000-01	1	1	1.5	*	27.00	RoC	N.A.		
2001-02	4	4	19.62	IDFC	1152.03	RoC	N.A.	1	
2002-03	2	2	5.88	IDFC	198.35	RoC	N.A.		
2003-04	1	1	13.5	IDFC	703.34	RoC	N.A.		
2004-05	3	3	54.6	IDFC	3445.50	2005 G	N.A.		
2005-06	1	1	3.5	IDFC	20.00	2005 G	N.A.		
2006-07	6	5	42.8	IDFC	2118.00	2005 G	N.A.		1
2007-08	3	3	20.6	MCA	1613.00	2005 G	N.A.		
2008-09	4	4	14.4	MCA	4442.45	2008 G	N.A.	2	
2009-10	11	8	61.37	MCA	2744.95	2008 G	N.A.		2
2010-11	9	7	58.92	MCA	3817.46	2008 G	N.A.		1
2011-12	3	2	79.32	MCA	7735.74	2008 G	N.A.		1
2012-13	11	11	39.2	MCA	1780.50	2008 G	N.A.	2	
2013-14	14	14	101.52	MCA	17839.83	2008 G	N.A.		
Total	81	74	569.93		49879.92			6	5

Notes:
1) (*) indicates agreements not based on any model agreement.
2) (IDFC) : indicates agreements based on Standard Agreement drafted by IDFC
3) (MCA): indicates Agreements based on Model Concession Agreement of the Ministry
4) (RoC) : indicates tariff was prescribed on return on capital employed basis. However there were no general tariff guidelines issued by ministry
5) 2005G : indicates tariff was prescribed as per 2005 Tariff Guidelines issued by Ministry
6) 2008G : indicates tariff was prescribed as per 2008 Tariff Guidelines issued by Ministry

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Data for Sample of Projects

(Kandla Port: Creation of facilities by M/s. ESSAR OIL LTD., Vadinar, for their 9 MMTPA Oil refinery off Vadinar)

Project Name	Date CA signed	Type and estimated max freight handling capacity at time of signing	Project cost at signature date	Actual project cost (if known)	Form of Model Concession Agreement used	Tariff regime applied	Debt/equity ratio at CA signing date	% Debt to be paid on concession-aire default	Volumes % of forecast (latest)	Application for revised tariff regime
Creation of Port related facilities by M/s. ESSAR OIL LTD. At OOT Department Vadinar, KPT for their 9 MMTPA Oil refinery off Vadinar Village	8/10/1997	7.5 MMTPA	Rs. 750 Cr.	Not known	The agreement signed in 1997 is not as per the form of Model Concession Agreement.	As per SOR approved by TAMP and terms & conditions of the Agreement.	NA	NA	M/s. ESSAR has been handling cargo to the tune of more than 300% of the capacity	SOR is revised based on the clauses of Agreement. Accordingly, revised tariff is applicable.

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Data for Sample of Projects

(Kolkata Port: Supply, Operation & Maintenance of cargo handling equipment at Berth Nos.2 & 8 Haldia)

Project Name	Date CA signed	Type and estimated max freight handling capacity at time of signing	Project cost at signature date	Actual project cost (if known)	Form of Model Concession Agreement used	Tariff regime applied	Debt/ equity ratio at CA signing date	% Debt to be paid on concession-aire default	Volumes % of forecast (latest)	Application for revised tariff regime
Supply, Operation & Maintenance of different cargo handling equipment at Berth Nos.2 & 8 of Haldia Dock Complex	October 2009	8.0 million tons	Rs.150 crore	Rs.140 crore *	Contracting model. Terms & conditions were approved by Board of Trustees.	This was a contracting model where port paid to contractor on per tonne basis finalised through tender, KoPT realised tariff from the users as per its Scale of Rates approved by TAMP.	Not known	N/A	N/A	N/A

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Data for Sample of Projects

(Chennai Port: Development of Barge handling facility at Bharathi Dock)

Project Name	Date CA signed	Type and estimated max freight handling capacity at time of signing	Project cost at signature date	Actual project cost (if known)	Form of Model Concession Agreement used	Tariff regime applied	Debt/equity ratio at CA signing date	% Debt to be paid on concession-aire default	Volumes % of forecast (latest)	Application for revised tariff regime
Develop-ment of Barge handling facility at Bharathi Dock	30.03.2013	1.35MTPA	Rs.27.29 Cr.	The project is yet to start	Model Concession Agreement issued by Ministry of Shipping , Ports wing	Yes, TAMP notified tariff on 17.08.12	*	**	Operation yet to start	no

**EAC recommended for the project and formal letter from MoEF is awaited. Financial Closure yet to be achieved .*
*** If the termination is after the date of Commercial operation, due to a concessionaire Event of Default, the compensation payable by the Concessioning Authority to the Concessionaire shall be the lowest of ,*
i. Book value
ii. 90%(ninety percent) of debt due
iii. The actual project cost

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Data for Sample of Projects

(Chennai Port: Chennai Container Terminal - CCTPL)

Project Name	Date CA signed	Type and estimated max freight handling capacity at time of signing	Project cost at signature date	Actual project cost (if known)	Form of Model Concession Agreement used	Tariff regime applied	Debt/equity ratio at CA signing date	% Debt to be paid on concession-aire default	Volumes % of forecast (latest)	Application for revised tariff regime
Chennai Container terminal Pvt. Ltd. (CCTPL)	09/08/2001	1.26 MTEU	150 million USD	Rs.778.03 Cr.	Model Concession Agreement based on IDFC agreement	Yes, TAMP notified tariff	Not known	*	About 60%	Revision of Tariff by TAMP is under litigation

** If the termination is after the date of Commercial operation, due to a concessionaire Event of Default, the compensation payable by the Concessioning Authority to the Concessionaire shall be the lowest of,*
i. Book value
ii. 90% (ninety percent) of debt due
iii. The actual project cost

Ministry of Shipping

Data required by World Bank Consultants for Contract Renegotiation (PPP Projects)

Data for Sample of Projects

(JL Nehru Port : Third Container Terminal - APMT)

Project Name	Date CA signed	Type and estimated max freight handling capacity at time of signing	Project cost at signature date	Actual project cost (if known)	Form of Model Concession Agreement used	Tariff regime applied	Debt/equity ratio at CA signing date	% Debt to be paid on concession-aire default	Volumes % of forecast (latest)	Application for revised tariff regime
Redevelop-ment of BT to Container Terminal (APMT)	10/08/2004	15.60 MTPA	Rs.900 Cr.	Rs.1078 Cr.	Model Concession Agreement	Yes, TAMP notified tariff	Not known	*	About 150%	no

** If the termination is after the date of Commercial operation, due to a concessionaire Event of Default, the compensation payable by the Concessioning Authority to the Concessionaire shall be the lowest of,*
i. Book value
ii. 90%(ninety percent) of debt due
iii. The actual project cost

Endnotes

1 Annual Report 2012-13 of the Ministry of Finance (Budget Division).

2 Guasch JL "Granting and Renegotiating Infrastructure Concessions: Doing it Right," WBI Development Studies, Washington: The World Bank, 2004.

3 South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons PPIAF May 2014.

4 Note that Guasch uses a very broad definition of renegotiation, namely "...a significant change or amendment not envisaged or driven by stated contingencies in any of the stated areas: tariffs, investment plans and levels, exclusivity rights, guarantees, lump sum payments or annual fees, coverage targets, service standards and concession periods." As such the number of renegotiations he cites is unsurprisingly high.

5 The EPEC PPP Guideline Stage 4 Phase 1 Contract Management: Managing changes not provided for in the PPP contract (European Investment Bank 2012).

6 Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the Award of Concession Contracts.

7 Defined in Article 8(2) as "….the total turnover of the concessionaire generated over the duration of the contract, net of VAT, as estimated by the contracting authority or the contracting entity, in consideration for the works and services being the object of the concession, as well as for the supplies incidental to such works and services."

8 A flexible contract is where parties plan to renegotiate price once uncertainty unfolds, a rigid contract is where parties cannot commit not to renegotiate but attempt to prevent renegotiation (Athias, 2007).

9 National Public Private Partnership Guidelines: Overview- Infrastructure Australia 2008.

10 Defined as "The government department or agency responsible for the application of PPP policy within a jurisdiction (often Treasuries)" in the National Public Private Partnership Guidelines.

11 New South Wales Government PPP Guidelines; August 2012.

12 The Promise and Peril of Public-Private Partnerships: Lessons from the Chilean Experience Ronald Fischer, Departamento Ingenierìa Industrial, Universidad de Chile June 2011.

13 Fischer.

14 In particular Professor Alexander Galetovic, Professor Ronald Fischer and Professor Eduardo Engel.

15 Defined in Article 8(2) as "….the total turnover of the concessionaire generated over the duration of the contract, net of VAT, as estimated by the contracting authority or the contracting entity, in consideration for the works and services being the object of the concession, as well as for the supplies incidental to such works and services."

16 Article 8 has threshold as EUR 5,186,000 (Rs 42,5 Crore).